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THE UNITED STATES FOREST POLICY

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74.

THE
UNITED STATES FOREST POLICY

BY

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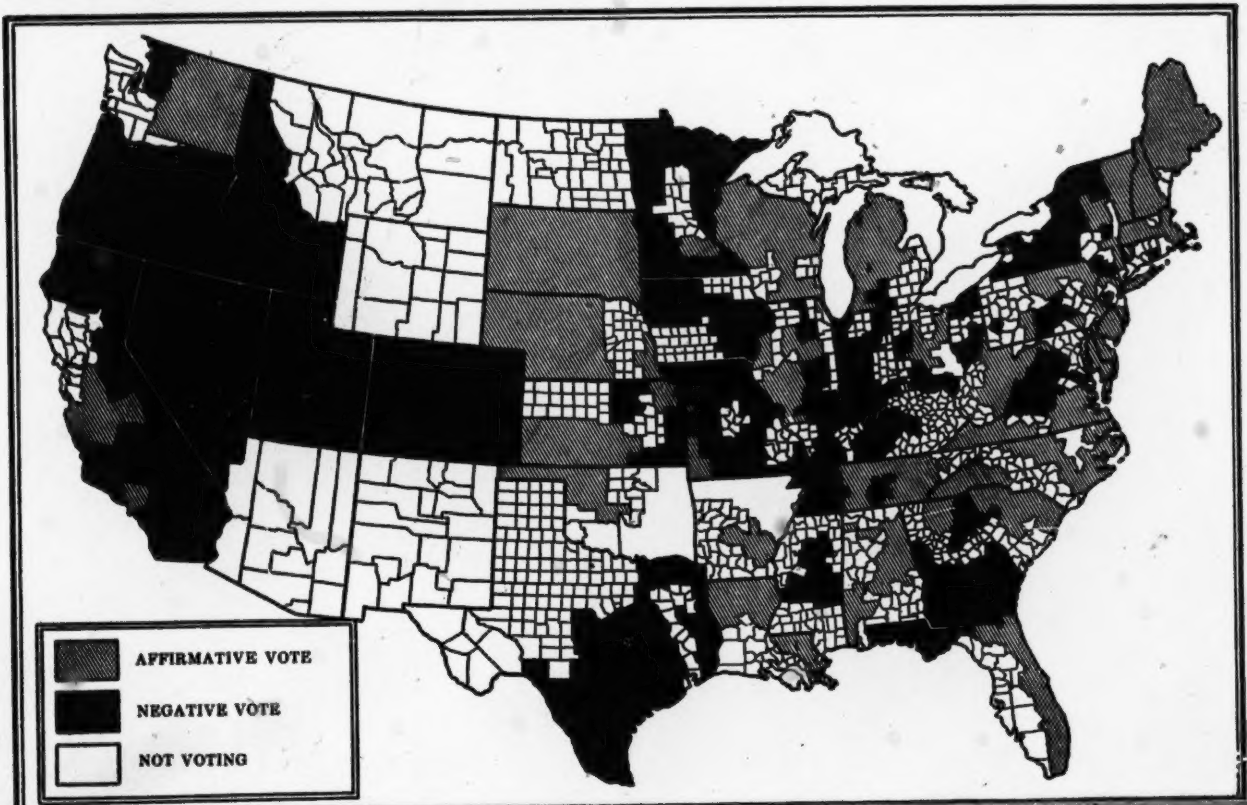
To My Mother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PREFACE

The history of the United States is fundamentally a history of rapid exploitation of immensely valuable natural resources. The possession and exploitation of these resources have given most of the distinctive traits to American character, economic development, and even political and social institutions. Whatever preëminence the United States may have among the nations of the world, in industrial activity, efficiency and enterprise, in standards of comfort in living, in wealth, and even in such social and educational institutions as are dependent upon great wealth, must be attributed to the possession of these great natural resources; and the maintenance of our preëminence in these respects is dependent upon a wise and economical use of remaining resources. Thus the question of conservation is one of the most important questions before the American people, and if the present study throws even a weak and flickering light upon that question, its publication will be abundantly justified.

The writer acknowledges a heavy obligation to some of his teachers, friends and colleagues for helpful criticism and suggestions. The work was begun under the direction of Professor Charles J. Bullock of Harvard University, and thanks are due him for searching criticism and suggestions, and for kindly help and encouragement. The writer owes much also to Professor Frederick J. Turner, Professor John M. Gries, and Dean E. F. Gay, of Harvard University, and to colleagues at the Iowa State College—Professor L. B. Schmidt, Professor John E. Brindley, Professor G. B. McDonald, and Professor J. J. Reighard. Professor F. H. Hodder of the University of Kansas offered valuable suggestions regarding some points in American history, and Doctor R. M. Woodbury read several chapters and submitted many able criticisms.

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In making acknowledgment to those who have assisted in the preparation of this book, the writer ventures the hope that these friends will not have to share in the responsibility for any faults that may appear in the work.

CONTENTS

CHAPTER I: OUR FORESTS PRIOR TO 1878: THE PERIOD OF BEGINNINGS 19

The Early Settlers and the Forests: The United States Naval Reserves: General Indifference in the Early National Period: Early Conservation Sentiment: Interest Shown by Government Officials: State Action: Action of the Association for the Advancement of Science: Early Interest in Timber Culture: State Timber Culture Laws: Tree Planting by the Railroads: Congressional Action; Factors at Work: Conservation Activity in Congress: The Timber Culture Act: The First Forest Reserve Bill: Unfavorable Legislation not Applying Specifically to Timber: Swamp Land Grants: Other State Grants: The Preëmption, Commutation Homestead, and Desert Land Laws: Public Sale: Railroad Land Grants: Unfavorable Legislation Applying Specifically to Timber: The Free Timber and Timber and Stone Acts: Conclusion.

CHAPTER II: THE PERIOD FROM 1878 TO 1891: FROM THE PASSAGE OF THE TWO TIMBER ACTS TO THE FOREST RESERVE ACT: WHOLESALE TIMBER STEALING 62

The Free Timber Act, Provisions and Interpretation: Evil Effects: Extension of Free Timber Privileges: The Timber and Stone Act; Provisions: Frauds under the Timber and Stone Act: Extension of the Provisions of the Act: Extensive Timber Stealing: Trespass by Railroads: Efforts to Protect the Public Timber: The "Bill to License Timber Thieves": Difficulties in the Way of Timber Protection: Growth of Conservation Sentiment: Forestry Associations: State Action: Other Indications of Conservation Interest: Congressional Action not Specifically Relating to Timber Lands; the Public Lands Commission and the General Revision Act of 1891: Failure of the Timber Culture Act: Appropriations to Prevent Fraudulent Entries: Abolition of Private Sale in the South: Indirect Encouragement to Timber Stealing: The Failure to Forfeit the Railroad Grants: The Railroad Attorney Bill: Timber on Indian Reservations: Appropriations for Timber Protection: Efforts to Secure Land Grants for Forestry Schools: Appropriations for Forestry Investigations: The Forest Reserve Act: Early Advocates of Forest Reserves: Congress and the Question of Forest Reserves: The Passage of the Forest Reserve Act.

CHAPTER III: THE FOREST RESERVES FROM 1891 TO 1897: NEED OF PROTECTION AND ADMINISTRATION 119

The Situation in 1891: The Creation of New Reserves: The Need for Protection of the Reserved Lands: Efforts in Congress to Secure Better Protec-

tion: The McRae Bill: The Commission of the National Academy of Sciences; and Cleveland's Proclamations of February 22, 1897: Previous Hostility toward the Reserves: The Attack of 1897: The Forest Lieu Section: The Act of 1897.

CHAPTER IV: THE FOREST RESERVES SINCE 1897: THE PERIOD OF CONSERVATION ACTIVITY . . . 143

The "Golden Era" of Forest Conservation Activity: Public Opinion and Conservation: State Conservation Activity: Education in Forestry: Forestry Journals and Forestry Societies: Other Indications of Conservation Sentiment: Broadening Scope of the Conservation Movement: The Public Lands Commission: The Waterways Commission and the Conference of Governors: The National Conservation Commission: Increase in Appropriations for Forestry Purposes: Transfer of the Reserves to the Department of Agriculture: Opposition to Increased Appropriations: Creation of New Reserves: Improvement of the Forest Fire Law: Authority to Arrest Trespassers without Process.

CHAPTER V: THE FOREST RESERVES SINCE 1897 (continued): ANTI-CONSERVATION ACTIVITY . . . 164

Anti-conservation Activity: Factors Tending to Arouse Western Hostility; Agricultural Lands in the Forest Reserves: The Lacey Bill: Grazing in the Forest Reserves: Efforts to Open the Reserves to Grazing: The Public Lands Convention at Denver: Aggressive Policy of Roosevelt and Pinchot: The Forest Lieu Act: Efforts to Repeal the Forest Lieu Act: Lieu Selection in the San Francisco Mountains Forest Reserve: Lieu Selection and the Mount Ranier National Park: The Oregon Timber Land Frauds: Inefficiency of the Early Forest Administration: Other Causes of Western Hostility: An Expression of the Western Attitude: Efforts to Overturn the Reservation Policy: Senator Heyburn and the Reserves: The Anti-conservation Attack of 1907: The Act of 1907: Anti-conservation Attacks since 1907: The Ballinger-Pinchot Controversy: The Alaska Forests.

CHAPTER VI: FOREST RESERVES IN THE APPALACHIAN AND WHITE MOUNTAINS 207

Early Agitation for Appalachian Reserves: The Demand for Forests in the White Mountains: Increasing Scope of the Movement: The Weeks Bill: Arguments in Favor of the Bill: Arguments against the Bill: Influences Favoring its Passage: Opposition to the Bill: Analysis of the Final Vote: Provisions of the Weeks Law: Later Changes: Results of the Law.

CHAPTER VII: THE UNRESERVED TIMBER LAND SINCE THE PASSAGE OF THE FOREST RESERVE ACT 224

The Timber and Stone Act Once More: Further Extension of Its Provisions: Unsuccessful Efforts to Repeal or Amend the Timber and Stone Act: The Suspension of Timber and Stone Entries in 1906: Sale of Burned Timber: Timber Sales Without Legislative Authorization: The Free Timber Acts Again: Further Extension of Free Timber Privileges: Unsuccessful Efforts to Curtail

Free Timber Privileges: Conservation Activity in Congress; Increasing Appropriations for Timber Protection: Other Helpful Legislation: Railway Land Grants Once More: The Act of 1916: The Northern Pacific Lands.

CHAPTER VIII: HOSTILITY TO THE NATIONAL FORESTS IN RECENT YEARS: OPPOSITION TO THE GENERAL POLICY OF RESERVATION 254

Opposition to the General Policy of Reservation; Interference with the Development of the West: Inclusion of Agricultural Lands: Efforts to Eliminate Agricultural Lands; The Nelson Amendment: Justice of the Complaints Regarding the Inclusion of Agricultural Lands: The Question of Ranger Stations: Grazing in the National Forests: Mining in the National Forests: Water Power Development in the National Forests: Withdrawal of Other Resources: Opposition to Saving for Posterity: Discrimination against the West: Opposition to Game Preservation: Loss of Taxing Power: Justice of Complaints Regarding Loss of Taxing Power: Inclusion of State Lands in the National Forests: Robbing the Western Forests for the Eastern Forests: Objection to an "Alien Government."

CHAPTER IX: HOSTILITY TO THE NATIONAL FORESTS IN RECENT YEARS (continued): CRITICISM OF THE FOREST SERVICE 284

The "Insolvency" of the National Forests and Alleged Extravagance of the Forest Service: Justice of These Complaints: The Timber Sale Policy of the Forest Service: The Forest Lieu Act Again: Heyburn's Criticisms: The Real Attitude of the West: Safety of the National Forests.

CHAPTER X: THE WORK OF THE FOREST SERVICE . 299

Advice and Assistance to Private Owners: Coöperation with States: Protection of Fish and Game: Recreational Uses of the Forests: Assistance to Grazing Interests: Investigative Work: Silvicultural Investigations: Forestation: Investigation of Forest Influences: Other Silvicultural Investigations: Investigations in Forest Products: Forest Products Research and the War.

CHAPTER XI: RESULTS OF OUR FOREST POLICY: CONCENTRATION IN THE OWNERSHIP OF STANDING TIMBER 315

Concentration of Ownership in Terms of Board Feet: Acreage Figures: Concentration of Ownership in the Northwest: The Three Big Holdings of the Northwest: Ownership in the Southern Pine Region: Ownership in the Lake States: Comparison of Ownership in the Different Regions: Timber Ownership outside the Investigation Area: Factors Augmenting the Power of Large Holders; Large Holdings Proportionately More Valuable: Large Holders Have the Most Valuable Lands: Large Holdings Include the Most Valuable Species: Causes of Concentration of Ownership; Railroad Land Grants: Swamp Land Grants: Other State Grants: The Cash Sale Law: Lieu Selections and Large Holdings: Large Holdings Normal in Timber Ownership: Speculation.

CHAPTER XII: RESULTS OF OUR FOREST POLICY (continued): CONDITIONS IN THE LUMBER INDUSTRY . 334

The So-called Lumber Monopoly: Lumbermen's Associations: The National Lumber Manufacturers' Association: Scope and Influence of Organizations: Efforts to Fix Prices: Pools in the Lumber Industry: Open Price Associations: Other Efforts to Fix Prices: Price Activities Among Retailers: Effectiveness of Efforts to Fix Prices: Effectiveness of Curtailment Campaigns: Possibility of Future Trouble: Instability of the Lumber Market: The Lumber Industry and Timber Speculation: Cost of Timber Ownership: Waste of Timber: Failure to Reforest Lands: The Question of Remedies: Government Regulation of Lumber Prices: Increased Government Ownership of Standing Timber.

CHAPTER XIII: CONCLUSION 369

European Influences in the Conservation Movement: The Attitude of Congress: The Ethics of Timber Stealing: Waste and Theft of Other Resources: A Rational Policy for the Future.

BIBLIOGRAPHY 378

INDEX 387

THE UNITED STATES FOREST POLICY

CHAPTER I

OUR FORESTS PREVIOUS TO 1878; THE PERIOD OF BEGINNINGS

THE EARLY SETTLERS AND THE FORESTS

THE attitude of the early settlers toward the timber resources of the country was generally one of indifference. This was only natural and inevitable, since in most regions the land was covered with forests, which had to be cleared before agriculture was possible, which presented only an obstacle to the spread of settlement. Toward a resource which at first seemed inexhaustible and only a bar to progress, there could at least be no general attitude of conservation.

The British policy of reserving the timber lands was regarded with considerable hostility. The British government early adopted the policy of reserving timber for her future supply of naval stores, particularly the large pine trees available for ship masts. Thus the charter granted the province of Massachusetts Bay in 1691 reserved to the Crown all trees two feet in diameter, and forbade anyone to cut such trees without a royal license. In 1704, the British parliament passed an act imposing a fine of five pounds upon anyone who should cut a pitch pine tree or a tar tree under twelve inches in diameter three feet from the ground. This act applied to several of the colonies; and similar enactments were made at various subsequent times. Very naturally the colonists strongly resented this policy.[1]

The British regulations showed some of the elements of a conservation policy on the part of the ruling country, and the attitude of some of the officials showed that there was a real concern for the future supply, at least of ship timber. Thus, in 1701, the Governor of New York expressed his fear that the sawmills would destroy all the timber in that colony, and recommended that each person who removed a tree should pay for planting four or five young trees. Still earlier than this, in 1696, the attention of the French governors of Canada had been directed to the wasteful destruction of the forests.[2]

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[1] In order to secure enforcement of the law of 1704, John Bridger was commissioned surveyor general of the woods, one of his duties being to mark with the broad arrow of the British navy all trees that were to be reserved for the Crown and keep a register of them. Edward Randolph had been surveyor of woods and timber in Maine in 1656, and Adolphus Benzel was appointed inspector of his Majesty's woods and forests in the vicinity of Lake Champlain in 1770. Fox, "History of the Lumber Industry in New York," 16: *Bul.* 370, Cornell Univ. Agr. Exp. Station: Ford, "Colonial Precedents of our National Land System," 145.

There appeared in a few instances, even on the part of the early settlers themselves, indications of some regard for the future timber supply.[3] In 1626, an ordinance was passed in Plymouth Colony reciting the inconveniences that are likely to arise in any community from a lack of timber, and declaring that no man should sell or transport any timber whatsoever out of the colony without the approval of the governor and council. Perhaps this was the first conservation statute passed in America. The ordinances of the Plymouth Colony, as revised and published in 1636, forbade any person to sell out of the colony any boards, planks, or timber cut from the lands reserved for public use, without leave from the public authorities. A Plymouth order of 1670 stated that several towns of the colony were already much straitened for building timber, and granted such towns the privilege of obtaining it from towns having plenty. In 1632, the Court of Boston ordered that no one should fell any wood on public grounds for paling, except such as had been viewed and allowed by the proper public official. An order of the Providence Plantations in 1638 required that two men should view the timber on the Common and determine what was best suited for the use of each person. Various statutes were early enacted in Rhode Island and in other colonies, regulating the export of lumber. In 1639, the General Court of the New Haven Colony forbade anyone to cut timber from common ground except where assigned by the magistrate, and during the next decade this General Court, as well as the Court of Connecticut at Hartford, passed several laws regulating the cutting of timber.

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[2] Fox, "History of the Lumber Industry in New York," 16: Phipps, R. W., "Report on the Necessity of Preserving and Replanting Forests," Toronto, 1883.

[3] *Proceedings*, Am. Forestry Congress, 1885: *Bul.* 370, Cornell Univ. Agr. Exp. Station: Fernow, "Economics of Forestry," 369: Kinney, "Forest Law in America," Ch. I. It is recorded of the Pennsylvania Germans that they were economical in the use of wood, even where it was abundant. They did not wantonly cut down forests or burn them, and, when using wood as fuel, they built stoves, in which there was less waste than in open fireplaces. The German of the nineteenth century likewise proved himself a friend of the trees. Through his early training at home, he understood the value of forests. Faust, "The German Element in the U. S.," II, 50-50.

In 1640, the inhabitants of Exeter, New Hampshire, adopted a general order for the regulation of the cutting of oak timber. In 1660, at Portsmouth, New Hampshire, a fine of five shillings was imposed for every tree cut by the inhabitants, except for their own buildings, fences and firewood; and in the towns of Kittery and Dover, strict limitations were put on the number of trees that a person could have at any one time, the limit at Dover being ten.

The General Assembly at Elizabethtown, East New Jersey, imposed a penalty of five pounds in 1678 for every tree cut from unpatented lands. In a council held at Elizabethtown in 1683, a resolution was adopted, reciting that much timber trespass and waste was being committed, and authorizing the Governor to issue a proclamation and enforce the law against timber trespass. In 1681, William Penn stipulated in his ordinances regarding the disposal of lands, that for every five acres cleared of forest growth, one acre should be left to forest. Strict laws against forest fires were passed by many of the colonies soon after they were established—by several of the New England colonies previous to 1650. A Massachusetts act of 1743 specifically recognized the damage caused by fire to young tree growth and to the soil, and a North Carolina act of 1777, imposing penalties for the unlawful firing of the woods, declared forest fires "extremely prejudicial to the soil."

The first legislative recognition in America of the principle of timber conservation through the imposition of a diameter limit for cutting, except the parliamentary acts directed at the maintenance of a supply of mast timber, was the statute passed at Albany, New York, in 1772. This act forbade any person to bring into Albany any wood below certain specified diameters—six inches for pine. In 1783, the General Court of Massachusetts passed an act forbidding the cutting or destroying of white pine trees *above* a certain size, from any lands of the state, without license from the Legislature. This law was strikingly similar to the one that had aroused such opposition on the part of the colonists of New Hampshire, when imposed by England during the colonial period.

In 1795, the Society for the Promotion of Agriculture, Arts and Manufactures published a report on the best method of preserving and increasing the growth of timbers, recommending that lands least valuable for agriculture be devoted to forests. This society evinced considerable interest in timber in various ways. In 1818, a Massachusetts act authorized agricultural societies of the state to offer premiums to encourage the growth of oaks and other trees necessary to the maintenance of a supply of ship-building material.[4]

This early interest in forestry does not of course represent a very common sentiment among the people. It is probable that some of this colonial legislation was inspired, or in some cases even imposed, by the royal governors. Also, some of the colonial laws which are sometimes referred to as illustrations of an early conservation sentiment, have probably very little to do with conservation. Thus, there were many statutes forbidding the cutting of timber on the lands of other persons, but these statutes seem to have meant merely that timber had come to have a value, rather than that the colonies were in general particularly apprehensive of a future scarcity of timber.[5]

Nevertheless, the illustrations given doubtless have some significance. There was some interest in forest conservation even in this early period, an interest due to the fact that the settlers had come from Europe where scarcity of timber was already felt, to the fact that the extent of the forest domain was entirely unknown, the population confined mainly to the Atlantic coast, and to the fact that, in the absence of railroad communication, only supplies of timber adjacent to rivers and sea were available. Furthermore, as in Europe, the fuel question was becoming acute in some places, since coal had not yet been brought into use, and location of timber supplies close to centers of civilization was of great importance.

THE UNITED STATES NAVAL RESERVES

The first action of the United States government regarding timber lands had no connection with these early signs of conservation interest, but was concerned rather with the matter of national defense.

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[4] Fernow, "Economics of Forestry," 369 et seq.: *Proceedings,* Am. Forestry Congress, 1885, 58.

[5] *Bul.* 370, Cornell Univ. Agr. Exp. Station.

The repeated depredations of Algerian pirates upon American merchant vessels during the first years of our national life, led to a demand for a navy, and in 1794 Congress authorized the President to provide for several vessels. Aggressions of the French navy upon American merchantmen led to further legislation in 1798, authorizing the President to provide for twelve more war ships.

The building of the vessels authorized by these early acts served to impress upon government officials the necessity of making provision for a future supply of timber for defense, and, by an act of 1799, Congress appropriated $200,000 for the purchase and reservation of timber or timber lands suitable for the navy.[6] Florida and Louisiana contained most of the oak timber then known to exist, oak being recognized as the most valuable timber, and, as that region was in foreign hands, little was done for some time, only two small purchases being made on the Georgia coast. These were Grover's Island, comprising about 350 acres, purchased for a consideration of $7,500, and Blackbeard's Island, with an area of 1600 acres, bought for $15,000.[7]

In 1816, after the second war with Great Britain, the United States entered upon a policy of naval expansion, and this again brought up the question of material for construction. The result was the act of 1817, authorizing the Secretary of the Navy to explore and select tracts of land producing oak and red cedar, and imposing a penalty for cutting such timber from these lands or any other public lands of the United States.[8]

In 1819, Florida was ceded to the United States by Spain, and, it presently appearing that the valuable stands of live oak in the new territory were being wasted and destroyed by trespassers, an act was secured in 1822, empowering the President to use the land and naval forces of the United States to prevent these depredations. Three years later, however, an agent of the government, appointed to investigate the timber resources of Florida, reported that live oak was being exported in considerable quantities from the eastern coast of the peninsula, and recommended the purchase and reservation of timber land, and the planting of trees on land already owned by the government.[9]

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[6] *Stat.* 1, 622.

[7] Hough, Franklin B., "Report on Forestry," made in pursuance of the act of Congress of August 15, 1876. Three volumes, published in 1877, 1878 and 1882 respectively. Vol. I, pp. 9-11: Kinney, "Forest Law in America," Ch. VII.

[8] *Stat.* 3, 347.

In connection with a naval appropriation act of 1827, the President was authorized to take proper measures to preserve the oak timber on the public lands, and to reserve such lands *anywhere on the public domain.* Not only was provision made for the reservation of these lands, but in Florida a system of cultivation was undertaken, with various experiments in transplanting—the first efforts at experimental forestry on the part of the United States government. An act passed in 1828 authorized the use of $10,000 of the naval appropriation of 1827 for the purchase of lands bearing live oak or other timber.[10]

The need of protection for the reserved timber was apparent, and in 1831, a law was passed forbidding the removal of oak, red cedar, or *any other timber* from these reserved lands, or from *any other lands* of the United States. The act of 1817 had prohibited the cutting of oak or red cedar from all the public lands of the United States, but the act of 1831 was the first general act applying to the entire domain and to all kinds of timber.[11]

One of the sections of an appropriation bill in 1833 required "all collectors of customs within the territory of Florida, and the states of Alabama, Mississippi and Louisiana, before allowing clearance to any vessel laden in whole or in part with live oak timber, to ascertain satisfactorily that such timber was cut from private lands, or if from public ones, by consent of the Navy Department."[12] Such vigilance as this indicates considerable interest in the preservation of a certain kind of the public timber.

Under authority of these various acts, a small amount of timber land was reserved in separate parcels in Georgia, Florida, Alabama, Mississippi and Louisiana; but the government experienced great difficulty in preventing trespass by timber thieves and encroachments by settlers, and it presently appeared that there was no navy timber of value on some of the tracts. The result was that in 1843 Congress opened some of the lands to settlement, and in 1853 the cedar lands which had been reserved in Clarke County, Alabama, were opened to sale.[13]

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[9] Kinney, "Forest Law in America," 236-239.

[10] Hough, "Report on Forestry," III, 330: *Stat.* 4, 242, 256.

[11] *Stat.* 4, 472. In U. S. vs. Briggs (9 Howard, 351), the Supreme Court of the United States held that this statute applied to all of the public lands of the United States, whether reserved for naval purposes or not.

[12] *Stat.* 4, 647.

The development of iron ships subsequent to the Civil War rendered wood almost obsolete for shipbuilding, and in 1879 Congress authorized the restoration of all reserves in Florida which were no longer needed for naval purposes. A similar act affecting all tracts in Alabama and Mississippi was passed in 1895. Certain small tracts in Louisiana are still held by the national government in the status of naval reserves.[14]

While these were thus naval reservations, related to the king's forest policy of colonial times rather than to the forest reserve policy of later years, yet they are of sufficient importance to merit brief treatment for several reasons. In the first place, they showed a disposition to conserve a natural resource of which future scarcity was apprehended. If naval construction had not, in the sixties, turned to iron ships, these early reservations might now be recognized as marking out a policy of the greatest importance. In the second place, it was in connection with these reserves that the first laws were passed for the protection of timber on the public domain, the law of 1831 being the ruling statute on the subject of timber depredations down to the present time. Furthermore, the first appropriations for protecting timber lands were closely connected with these naval reserves, for in 1872 the first appropriation, of $5000, for the protection of timber lands, was made in the naval appropriation act.[15]

GENERAL INDIFFERENCE IN THE EARLY NATIONAL PERIOD

These early forest reserves are thus seen to have been of little importance and of little significance as to the attitude of the country toward forest conservation. It is even true that the period during which they were being created, 1817 to 1858, was a period when destruction of timber was going on with least opposition from conservation forces. There had been, as already seen, some interest in timber preservation in the colonial period, and later, but with the rapid growth of the country, the development of new means of transportation, and with the use of coal as fuel, the apprehensions regarding timber supplies seem almost to have vanished.

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[13] *Stat.* 5, 611; 10, 259. Mr. Hough, in his report, states that a total of 244,452 acres of timber land was reserved under these acts, but Mr. Kinney puts the figure at approximately 25,000 acres. The writer is unable to account for so great a discrepancy, and is unable, from any sources at his disposal, to ascertain whether Mr. Hough was correct in his figures or not. (Hough, "Report on Forestry," I, 11: Kinney, "Forest Law in America," 240.)

[14] *Stat.* 20, 470; 28, 814. See also S. 196; 50 Cong. 1 sess.

[15] *Stat.* 17, 151.

Between 1820 and 1870, the population more than quadrupled; a vast number of farms were carved out of the forest, the timber, in the absence of a ready market, being largely burned. "Pines and oaks were remorselessly felled, and every settlement showed what Flint called a 'Kentucky outline of dead trees and huge logs lying on all sides in the fields.' Underbrush was fired with wanton carelessness, and thousands of acres of valuable timber went up in smoke." Hunters sometimes fired the woods to drive the game into the open. Lumbering became more of a commercial business, with larger mills operating. In 1870, there were in the United States 26,945 lumber manufacturing establishments, employing 163,637 hands, who, using capital aggregating $161,500,273, produced a total product valued at $252,339,029—a greater product than any other manufacturing industry except flouring and grist mills. All this indicates a very effective exploitation of the country's timber resources.[16]

EARLY CONSERVATION SENTIMENT

A few warning voices protested against forest destruction, even during this period. As early as 1819, the French naturalist, the younger Michaux, in his work on "The North American Sylva," spoke warningly of the rapid destruction of trees. "In America," he said, "neither the Federal Government nor the several states have reserved forests. An alarming destruction of the trees proper for building has been the consequence, an evil which is increasing and which will continue to increase with the increase of population. The effect is already very sensibly felt in the large cities, where the complaint is every year becoming more serious, not only of excessive dearness of fuel, but of the scarcity of timber. Even now inferior wood is frequently substituted for the White Oak; and the Live Oak so highly esteemed in ship building, will soon become extinct upon the islands of Georgia."[17]

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[16] Coman, "Economic Beginnings of the Far West," II, 50: Fernow, "Economics of Forestry," 371: Flint, "Recollections of the Last Ten Years," 232: Levering, "Historic Indiana," 480: Trollope, "Domestic Manners of the Americans," 93: *Proceedings*, Am. Forestry Assoc., 1894-95-96, 81: Thwaites, "Early Western Travels," III, 327.

In 1839, a very interesting paper was issued by Romero, minister of the interior at Mexico, on the subject of forestry. He said that the republic had for some years suffered from droughts, that harvests failed and cattle died; and that reason, tradition and experience pointed to the devastation of the forests and denudation of the hills and mountains as influential causes of such calamities. In 1845, a series of regulations were adopted for California to prevent the indiscriminate destruction of wood and timber, and restricting cutting to the owners of the land.[18]

A book published in Boston in 1830 contains the following: "The indiscriminate clearings of the agricultural settlers and the conflagrations which occasionally take place, are the causes which in a few centuries may render North America no longer an exporting country for timber."[19] In 1832, J. D. Brown, in his "Sylva Americana," wrote: "Though vast tracts of our soil are still veiled from the eye of day by primeval forests, the best materials for building are nearly exhausted. And this devastation is now become so universal to supply furnaces, glass houses, factories, steam engines, etc., with fuel, that unless some auspicious expedient offer itself and means speedily resolved upon for a future store, one of the most glorious and considerable bulwarks of this nation will within a few centuries be nearly extinct. With all the projected improvements in our internal navigation, whence shall we procure supplies of timber fifty years hence for the continuance of our navy? The most urgent motives call imperiously upon our Government to provide a seasonable remedy for such an alarming evil."[20]

In 1837, Massachusetts provided for a special survey of the state's forest resources, and after several years' work, George B. Emerson published his "Report on the Trees and Shrubs Naturally Growing in the Forests of Massachusetts." Professor Emerson was one of the earliest advocates of forest conservation in America.[21] An ordinance passed in 1851 by the General Assembly of the newly formed "State of Deseret," the Mormon settlement later called Utah, imposed a penalty of $100, in addition to the liability for all damage, on anyone who should waste, burn, or otherwise destroy timber in the mountains. In 1855, Mr. R. U. Piper of Woburn, Massachusetts, in his book on "The Trees of America," made an extended appeal for forest protection and for the planting of trees. "It seems that the supply of many kinds of wood which are necessary for mechanical purposes is becoming so uncertain as to make it a matter of serious inquiry what is to be done in our own day to meet the demand," he complained. "When Canada has exhausted her supply, which she must at some time do, where are we to go? In our enjoyment of the present we are apt to forget that we cannot without sin neglect to provide for those who are to come after us. It is a common observation that our summers are becoming dryer and our streams smaller, and this is due to forest destruction, which makes our summers dryer and our winters colder." Piper quoted from William Cullen Bryant to show that the rivers in Spain were drying up because of the destruction of forests. In 1855, André Michaux bequeathed $12,000 to the American Philosophical Society in Philadelphia for forestry instruction.

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[17] Michaux, F. Andrew, "The North American Sylva," p. 4.

[18] Hittel, "History of California," II, 364.

[19] "Library of Entertaining Knowledge; Vegetable Substances, Timber Trees," 67.

[20] Brown, "Sylva Americana," Preface, p. v.

Five years later, Harland Coultas spoke of the "formidable scale" on which the woods were disappearing. "In America we are in danger of losing sight of the utility of the woods," he said. " . . . If we remove trees from the mountain side, from a low, sandy coast, or from an inland district only scantily supplied with water, there is no end to the mischievous consequences which will ensue. By such ignorant work as this the equilibrium in the Household of Nature is fearfully disturbed." In 1865, the Rev. Frederick Starr discussed fully and forcibly the "American Forests, their Destruction and Preservation." In this treatise he made the following prophecy: "It is feared it will be long, perhaps a full century, before the results at which we ought to aim as a nation will be realized by our whole country, to wit, that we should raise an adequate supply of wood and timber for all our wants. The evils which are anticipated will probably increase upon us for thirty years to come, with ten-fold the rapidity with which restoring or ameliorating measures shall be adopted."[22]

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[21] *Proceedings*, Am. Forestry Congress, 1885, 62: Kinney, "Forest Law in America," 3.

In 1867, the committee appointed by the legislature of Michigan to investigate forest destruction reported: "The interests to be subserved, and the evils to be avoided by our action on this subject have reference not alone to this year or the next score of years, but generations yet unborn will bless or curse our memory according as we preserve for them what the munificent past has so richly bestowed upon us, or as we lend our influence to continue and accelerate the wasteful destruction everywhere at work in our beautiful state."[23] In 1868, George P. Marsh published his famous work on "Man and Nature," in which he discusses at great length the effects of forest destruction upon climate, rainfall, and floods.[24] This book had a very great influence, and was frequently cited by the early conservationists. A few years later the *Overland Monthly* published an able article by Taliesin Evans on the relation of conservation to lumber exports;[25] and about the same time N. U. Beckwith wrote in the *Canadian Monthly* of the "habitual, wicked, insane waste of lumber" in Canada.[26] As early as 1873, Verplanck Colvin was urging the legislature of New York to buy the forests at the sources of the Hudson; and in the same year, Governor Hartranft of Pennsylvania, in his message to the legislature, called attention to the importance of forest preservation.

The year 1872 marks the date of several events of importance in the forestry movement. In that year, $100,000 was given to Harvard College by the will of James Arnold to establish in the Bussey Institution a professorship of tree culture, and maintain an arboretum,[27] while in a western state, arbor day was celebrated for the first time at the instance of Governor Morton of Nebraska.[28] In the following year, F. B. Hough wrote at considerable length regarding the "growing tendency to floods and droughts," asserting that it could "be directly ascribed to clearing of woodlands, by which the rains quickly find their way into the streams, often swelling them into destructive floods, instead of sinking into the earth to reappear as springs." Leonard B. Hodges, one of the foremost of the early conservationists, did more than preach, for in 1874 he issued his "Practical Suggestions on Forest-Tree Planting in Minnesota," and, as superintendent of tree planting for the St. Paul & Pacific Railroad, he did a great deal to stimulate timber planting on the prairies. In 1876, James Little of Montreal, one of the earliest writers on forestry, called attention to the rapid destruction of timber in Canada and in the United States, and presented a vast array of statistics to prove that a single decade would "make a clean sweep of every foot of commercial wood in the United States east of the Pacific slope." The Centennial Exhibition at Philadelphia in 1876 had an exhibit in the interests of forestry. It was in 1876 also that the first forestry associations were formed—the American Forestry Association at Philadelphia, and a state association at St. Paul, Minnesota. The American Forestry Association never thrived, and was later (1882) absorbed into a new association.

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[22] Coultas, Harland, "What May be Learned from a Tree," 179: H. Doc. 181; 55 Cong. 3 sess., 168.

[23] Michigan, *House Documents*, No. 6, 1867.

[24] Marsh, "Man and Nature," 128-329.

[25] *Overland Monthly*, March, 1871, 224.

[26] June, 1872, 527.

[27] In 1835, Benjamin Bussey of Roxbury, Massachusetts, had provided for a school of agriculture and horticulture as a department of Harvard College, and in 1870, the school had been opened.

In 1877, F. L. Oswald wrote in the *Popular Science Monthly* concerning the sanitary influence of trees: "Forests exhale oxygen, the life-air of flames and animal lungs, and absorb or neutralize a variety of noxious gases. Scirrhous affections of the skin and other diseases disappear under the disinfecting influence of forest air. Dr. Brehm observes that ophthalmia and leprosy, which have become hereditary diseases, not only in the valley of the Nile, but also in the tablelands of Barca and Tripoli, are utterly unknown in the well timbered valley of Abyssinia, though the Abyssinians live more than a hundred geographical miles *nearer* the equator than their afflicted neighbors. . . . Since the Portuguese have felled their glorious forests (those on the

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[28] According to some accounts, the arbor day idea originated in 1865, with B. G. Northup, secretary of the Connecticut Board of Education. Dr. Fernow thinks perhaps the institution of arbor day hurt the forestry movement by leading people into the misconception that forestry consists in tree planting. (*Forestry and Irrigation*, Apr., 1908, 201: Fernow, "Economics of Forestry," 379: *Proceedings*, Am. Assoc. for the Advancement of Science, 1873, 2.)

Madeira Islands) for the sake of the 'madeira,' (building material), these islands have become hotbeds of disease. The valley of the Guadalquivir, as late as a century before the discovery of America, supported a population of 7,000,000 of probably the healthiest and happiest men of Southern Europe. Since the live oak and chestnut groves of the surrounding heights have disappeared, this population has shrunk to a million and a quarter of sickly wretches, who depend for their sustenance on the scant produce of sandy barrens that become sandier and drier from year to year."[29] A book on "Forests and Moisture, or Effects of Forests on Humidity of Climate," by a Scotch writer, John C. Brown, appeared in Edinburgh in 1877; and this book contained an elaborate discussion of the effects of forests on climate, citing certain observations made in Central Park, New York. These observations did not show any decrease in rainfall with the decrease in the surrounding forests. This book also referred to the claim made by certain commissioners in Maine, that the water in streams was diminishing, and that the amount of snow and rain was decreasing with the destruction of the forests.

INTEREST SHOWN BY GOVERNMENT OFFICIALS

Several government officials saw the need of forest protection. In 1849, the report of the Commissioner of Patents contained the prophecy: "The waste of valuable timber in the United States will hardly begin to be appreciated until our population reaches 50,000,000. Then the folly and short-sightedness of this age will meet with a degree of censure and reproach not pleasant to contemplate."[30] The report of the same office for 1860 contained an article by J. G. Cooper, in which the effect of forests on climate and health was discussed at length.[31] This, it may be noted, was a favorite theme with conservationists of the time, the effects of forests on climate, and especially on rainfall, being often exaggerated.

In 1866, the Commissioner of the Land Office, Joseph M. Wilson, declared that the supply of timber in the Lake states was "so diminishing as to be a matter of serious concern." Commissioner Wilson was especially interested in the matter of tree planting on the plains, and in both succeeding annual reports he devoted considerable attention to this matter. In his report for 1868 he gave a long and detailed account of forest conditions in various countries of the world; pointing out warningly the climatic changes which in Spain, Southern France, Italy, Asia Minor, and other regions, were supposed to have resulted from the destruction of the forests. He predicted that within forty or fifty years our own forests would have disappeared, while those of Canada would be approaching exhaustion. "Our live-oak, one of the best ship-timbers in the world," he said, "abundant enough at one time to have supplied, with prudent management, our navy yards and ship builders for generations, may be for all practical purposes considered as exhausted. Our walnut timber . . . will soon share the same fate. . . . Next we may expect a scarcity in our ash and hickory so much sought after by the manufacturers of agricultural machines and implements." Like other writers of this period, Commissioner Wilson put considerable emphasis upon the climatic influence of forests, claiming that in several of the eastern states the destruction of forests had brought such extremes in climate that fruit raising, and even the raising of wheat, had become a very uncertain business.[32]

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[29] *Popular Science Monthly*, Aug., 1877, 385.

[30] *Report*, Com'r of Patents, 1849, Pt. II, 41. Cited in Fernow, "Economics of Forestry," 374.

[31] *Report*, Com'r of Patents, 1860, 416.

In 1870, R. W. Raymond, United States Commissioner of Mining Statistics, wrote in forcible terms of the wanton destruction of timber in the mining districts of the Rocky Mountain and Pacific Coast states.[33] Two years later Willis Drummond, Commissioner of the Land Office, called attention to the importance of protecting the forests of the public domain from waste and spoliation, and his appeal for help against the timber thieves was repeated each year, as long as he remained in office.[34] In 1872, also, C. C. Andrews made a report to the Department of State on the forests and forest culture of Sweden. In 1873, John A. Warder, commissioner of the United States at the Vienna International Exposition, prepared his "Report on Forests and Forestry," which was printed two years later. It contained an account of the forestry exhibit at the exposition, and an appeal for better methods in the United States.

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[32] *Reports*, Land Office, 1866, 33; 1867, 131, 135; 1868, 173-199, 190, 191.

[33] H. Ex. Doc. 207; 41 Cong. 2 sess., 342.

[34] *Report*, Land Office, 1872, 26, 27.

STATE ACTION

Several of the states early evinced an interest in forest problems. In 1867, commissioners were appointed in Wisconsin to "ascertain and report in detail to the legislature certain facts and opinions relating to the injurious effects of clearing the land of forests upon the climate; the evil consequences to the present and future inhabitants, the duty of the state in regard to the matter; what experiments should be made to perfect our knowledge of the growth and proper management of forest trees; the best methods of preventing the evil effect of their destruction; what substitutes for wood can be found in the state, and generally such facts as may be deemed most useful to persons desirous of preserving and increasing the growth of forest and other trees in the state." In fulfillment of this modest duty, the commission made some investigations and submitted a report, pointing to Palestine, Egypt, Spain, and Southern France as dreadful examples of national ruin due to forest denudation. Somewhat strangely, this commission expressed a very reasonable and judicious opinion as to the effects of forests on rainfall. From some writings of this time, one might almost believe that forest denudation was the most common cause of the fall of nations.

Early in the same year that the Wisconsin commission was making investigations, T. T. Lyon and Sanford Howard sent a memorial to the legislature of Michigan, in which they claimed to have noticed unfavorable changes in climate due to the destruction of the forests. In response to this memorial, the legislature appointed a committee of investigation, and this committee made a report in February, 1867, in which, like the Wisconsin commission, they put great emphasis on the climatic influence of forests. They also prepared and introduced into the legislature a bill providing for timber culture.

In 1869, the Maine Board of Agriculture appointed a committee to present to the legislature suggestions as to a forest policy, and to call the attention of Congress to the subject.[35] The question of forest conservation had been discussed in New York even during the time of

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[35] Hough, "Report on Forestry," I, 207.

DeWitt Clinton, but the first action came in 1872, when a law was passed naming seven citizens as a State Park Commission, and instructing them to make inquiries with a view to reserving or appropriating the wild lands lying northward of the Mohawk. This commission, of which Verplanck Colvin was a member, recommended a law forbidding further sale of state lands.[36] Minnesota appropriated money to aid the Forestry Association formed in St. Paul in 1876. In 1877, Connecticut provided by law for a report on forestry, and an agent was sent to Europe to get the material for this report.[37] In 1864, California passed a law forbidding the cutting of trees on state lands, but rendered the law practically inoperative by a proviso that it should not apply to timber cut for manufacture into lumber or firewood, for tanning or agricultural or mining purposes. In 1872, California passed a law against setting fire to forests, and in 1874, a law to protect the big trees—applying only to trees over sixteen feet in diameter. Other states had, of course, preceded California in the protection of forests against fire. In 1876, Colorado included in her constitution a section relating to protection of forests.[38]

ACTION OF THE ASSOCIATION FOR THE ADVANCEMENT OF SCIENCE

More fruitful of immediate results than most of this state legislation was the adoption in August, 1873, by the American Association for the Advancement of Science, of a resolution providing for the appointment of a committee to memorialize Congress and the several state legislatures on the importance of forest preservation, and to recommend needed legislation.[39] The committee appointed was composed of F. B. Hough of New York, George B. Emerson of Boston, Professor Asa Gray of Cambridge, Professor J. D. Whitney of California, Professor J. S. Newberry and Lewis Morgan of New York, Professor William H. Brewer of New Haven, Charles Whittlesby of Cleveland, Ohio, and Professor E. W. Hilgard of Ann Arbor. At a preliminary meeting in Boston, a sub-committee composed of George B. Emerson and F. B. Hough was appointed to give personal attention to the matter. After much deliberation and consultation with several members of Congress, with the Secretary of the Interior, the Commissioner of the Land Office, and even with the President, this subcommittee adopted a memorial to Congress, calling for a commission of inquiry. The response to this memorial will be noted later. (See page 42.)

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[36] *Am. Forestry,* Dec., 1910, 695: Fernow, "Economics of Forestry," 386: *Proceedings,* Am. Forestry Assoc., 1894-95-96, 145.

[37] Hough, "Report on Forestry," I, 205.

[38] *Ibid.* The same constitutional convention that drew up the Colorado constitution also adopted a strongly conservationist memorial to Congress, asking for the transfer to the state of all the timber lands on the public domain within the state. The motive behind this is betrayed by Colorado's later energetic opposition to the Federal forest policy.

[39] S. Ex. Doc. 28; 43 Cong. 1 sess.

EARLY INTEREST IN TIMBER CULTURE

It may seem strange that interest should have developed regarding the planting of new trees before there was any general interest in the preservation of forests already grown; but without doubt the matter of tree planting was of greater interest in the early seventies than any other subject relating to forestry.

In forested states and regions, interest in timber protection was naturally slow to develop. In those sections of the country where most of the timber was gone, as for instance in New England, considerable interest had arisen, but even here forest preservation occupied a less conspicuous place than forest planting, in the minds of many conservationists. Thus the prizes offered by the Massachusetts Society for the Promotion of Agriculture very early in the century, were for forest plantations, not for conspicuous service in the preservation of forests. R. U. Piper's appeal referred to above was mainly for the planting of trees rather than for protection. So also was the appeal of Commissioner Wilson, and the most of the agitation during the early period.

In forested regions where a large supply of timber still existed, as for instance in the West and in some parts of the Lake states, there was, of course, very little general interest in forest preservation; and even where the supply of timber was observed to be disappearing rapidly and some public interest was aroused, timber companies were strong enough politically to block any important protective legislation. Furthermore, much of the forest land still belonged to the Federal government, and stealing from the Federal government has frequently been regarded with indifference or approval by the public land states. For all these reasons, interest in the protection of the forests was slow to develop, and legislation was generally impossible.

Interest in tree planting, on the other hand, was stimulated by several factors, and there were no commercial forces opposed to legislation. The central western states were being rapidly peopled, and here the scarcity of timber was immediately felt as a hardship, while periods of drought in some of the prairie states led to a great interest in the question of the relation of forests to rainfall. As has already been suggested, this question of the relation of forests to climate, and especially to rainfall, was one of the most popular topics with writers on forestry during this period. So much had the question been discussed, indeed, that President Loring, in his opening address at the American Forestry Congress in 1883, announced: "The influence of forests on rainfall has been so exhaustively discussed that little of value can here be added."

Nevertheless, this was a live question for many years after. Fuller's "Practical Forestry," appearing in 1884, begins with a treatment of the influence of forests on climate. In the *Proceedings* of the American Forestry Congress in 1885, the influence of forests on climate was mentioned first of all among the considerations noted as actuating the forestry movement; in fact, a great many of the forestry association meetings in the eighties and early nineties were to some extent devoted to discussions of this question. As late as 1897, Representative Bartholdt of Missouri expressed his opinion that there was an intimate connection between forest destruction and cyclones. "Is it not a fact," he asked in Congress, "that cyclones and inundations were comparatively unknown before the wholesale destruction of our forests?" This exaggeration, by some writers, of the effect of forests on climate no doubt had an influence on public opinion. In the states once timbered but now largely barren of merchantable timber, observers claimed to note climatic changes and were demanding reforestation; and since no commercial forces were opposed to this demand, it was easily enacted into law.[40]

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[40] *Proceedings*, Am. Forestry Congress, 1883, 15; 1893, 45, 58: *Cong. Rec.*, May 11, 1897, 1007: *Bul.* 24, Bureau of Forestry, Vol. II, 66.

STATE TIMBER CULTURE LAWS

A Minnesota act of 1867 appropriated three hundred dollars to enable the state agricultural society to offer premiums for the best five acres of cultivated timber or for the best continuous half mile of live hedge fence; but Kansas passed the first general timber culture act in 1868, offering a bounty of $2 per acre for timber successfully cultivated for three years. Wisconsin followed with a similar law the same year, while Iowa passed a law providing for a tax exemption for ten years for every acre so planted. During the following decade, laws providing either bounty or tax exemption were passed in the following states: Nebraska and New York (1869); Missouri (1870); Minnesota (1871); Maine (1872); Nevada (1873); Illinois (1874); Dakota, Connecticut, Wyoming and Washington (1877); Massachusetts and Rhode Island (1878). During the same period a number of state laws were passed to foster the planting of trees along highways. The net result of all timber culture was very small, however, and many of the laws were soon repealed.[41]

TREE PLANTING BY THE RAILROADS

Interest in the subject of tree planting is shown, not only by the state legislation, but also by the activity of various railroads in such experiments. In 1870, the Kansas Pacific Railroad began experiments at three stations, but soon gave them up.[42] In the same year, the St. Paul & Pacific Railroad began experiments in the prairie districts along its course. In 1872, the Burlington & Missouri River Railroad Company of Nebraska planted trees along the Platte River. In 1873, the St. Paul & Sioux City Railroad began experiments, and in the same year the Santa Fé established three nurseries in Kansas. In 1875, the Northern Pacific, and two years later the Southern Pacific, decided on a similar policy. The Illinois Central, the Kansas City, Fort Scott & Gulf, the Missouri Pacific, and other roads also conducted experiments in tree planting.[43] The purpose of the railroads in this work was to demonstrate the value of their land, to test the value of certain woods for railroad purposes, and to remove the sterile appearance of railroad stations; and, while direct results were generally disappointing, the experiments helped to give a knowledge of the adaptability of different trees to various soils and climates, and at least taught many people what not to expect from prairie forestry.

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[41] Hough, "Report on Forestry," I, 205, 206, 213: *Proceedings*, Am. Forestry Congress, 1885, 61: Kinney, "Forest Law in America."

[42] Hough, "Report on Forestry," I, 118-122.

[43] *Fourth Biennial Report*, Cal. State Board of Forestry, 1891-92: *Forest Bul.* 1.

CONGRESSIONAL ACTION: FACTORS AT WORK

Attention has now been called to the growth of public interest, and even state activity in regard to forestry. Before entering into a discussion of the action of the Federal Congress, it will be necessary to point out some of the various influences at work there during the seventies. The government officials having charge of the forests on the public lands, the Secretaries of the Interior, and the Commissioners of the Land Office, although many of them western men, with the western bias on public land questions, were generally awake to the dangers of forest destruction, and called out insistently for better laws and better means of enforcement. In 1878, the annual message of President Hayes called special attention to the need for forest preservation.[44] An increasing number of scientific men were working toward the same end, either alone or with commissions or forestry associations, or with learned societies, such as the American Association for the Advancement of Science; while slowly following these leaders, a public opinion was developing, stimulated by the disappearance of forests in many parts of the country, particularly in the East. Possibly, too, the general moral tone of the country was rising from the low level to which it had sunk in the years following the Civil War. Fernow says timber prices were rising,[45] but they were not rising very rapidly; and even if they had been, it is a debatable question whether this would have been a factor favorable to conservation. It might have had influence in arousing public interest, but it would also have made timber stealing more profitable.

Factors hostile to conservation were at work at all times, and they developed strength rapidly. The timber interests had been fattening on government lands, and had become a power in Congress, especia[illegible] since they were allied with some of the land-grant railroads. Throug[illegible]out the West, the miners also needed timber in their business, and were therefore opposed to conservation, while even agricultural settlers near the timber districts always felt that they were entitled to free timber, and opposed any restriction on its disposal. Stockmen had no particular interest in the timber lands at this time, but they could be depended upon to line up with the other western men. These four classes included a working majority in most of the western states, and the admission of several new states had strengthened the forces naturally opposed to conservation. In 1850, California had been admitted; in 1858, Minnesota, and during the next decade, Oregon and Nevada, while Colorado was admitted in 1876. These new states gave the forces opposed to conservation somewhat greater strength, especially in the Senate, a strength out of all proportion to mere numbers; first, because these forces, having interests at stake, were active, while the conservationists in Congress, having no pecuniary interests in the matter, were usually half-hearted; and secondly, because western men were usually well represented in the Committee on Public Lands, and thus exerted a disproportionate influence in all land legislation. A further factor opposing conservation was the great railway development in the early seventies. It not only called for considerable timber in construction, but by the vast grants of lands, in some cases timber lands, gave the railroads an interest hostile to conservation. Furthermore, it opened up vast tracts of timber lands previously safe from spoliation.

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[44] *Cong. Rec.*, Dec. 2, 1878, 6.

[45] Fernow, "Economics of Forestry," 459, Appendix. See also Compton, "Organization of the Lumber Industry," 77.

These were the factors at work. It should be pointed out, however, that there were no definite conservation and anti-conservation parties in Congress as early as this. Perhaps it is accurate to speak of "conservation forces" at this time, but these forces were never strong enough to make a clear issue of the question of conservation until near the end of the century; and the "conservation movement," embracing this conservation of all natural resources, did not develop until still later—under President Roosevelt. It would be entirely misleading to speak of "anti-conservationists," or perhaps even of "anti-conservation forces" in this early period. There were, however, certain forces favorable to rapid and unhindered appropriation and exploitation of e resources of the country and opposed to conservation; and when ther forces became strong enough to attempt legislation, these forces united in opposition.

CONSERVATION ACTIVITY IN CONGRESS

Probably little significance is to be attached to the grant of $10,000 in the annual appropriation bill of 1868, for various purposes, including the purchase of *trees, vines,* and *bulbs.*[46] This item appeared each year thereafter, but doubtless the purchase and distribution of seeds, bulbs and vines among the people is significant rather of the quality of American statesmanship than of any great interest in forestry.

The first appropriation for the protection of timber lands, in the Naval Appropriation Act of 1872, has been mentioned. There had been some effort to protect the timber lands long before this. A system of timber agencies had been established very early, but discontinued in 1854, when the supervision was transferred to the Department of the Interior.[47] In 1855, however, a circular had been issued by the Department of the Interior directing the land officers to investigate any reports of spoliation of public timber lands, and to seize all timber cut from such lands and sell it at public auction; while they were to notify the proper officers so that the trespassers might be arrested. No compromise was permitted.

The circular of 1855 remained the basis of regulation down to 1877, when Secretary of the Interior Carl Schurz inaugurated the system of special agents for the detection of timber trespasses;[48] but a lack of effective enforcement is indicated by the fact that the total net revenue to the government for millions of dollars worth of timber taken, from the beginning of records to January, 1877, was only $154,373. Before 1872, it was a general rule that the expenses incurred should be limited to the amount realized from the sale of the timber seized, and of course this prevented any effective prosecution of timber trespassers.[49]

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[46] *Stat.* 13, 155.

[47] Hough, "Report on Forestry," I, 12: *Report*, Sec. of Int., 1877, 16-20.

[48] Hough, "Report on Forestry," II, 8.

[49] *Ibid.*, I, 13.

Even if there had been an abundance of funds for the prosecution of trespassers, little could have been accomplished, because of the difficulty of securing, in the forest regions, any sentiment favorable to timber protection. Stealing timber was hardly regarded as a serious offense. Thus, when a certain timber owner in Wisconsin tried to get a lawyer to prosecute a trespasser for stealing some choice timber from his own private land, he received the suggestive answer: "Now, don't try that. All of those fellows have had 'some of them hams,' and you can't get a jury in all that country that will bring you in a verdict of guilty, no matter how great and strong the evidence."[50]

Complaints from the timbermen would, however, indicate that the efforts of the government were not entirely ineffective, at least in the region of the Lake states. Thus, as early as 1852, Representative Eastman of Wisconsin spoke bitterly of the manner in which "the whole power of the country, in the shape of the United States marshals, and a whole posse of deputies and timber agents appointed by the President without the least authority of law," had been "let loose upon this devoted class of our citizens" (the timbermen). "They have been harassed almost beyond endurance with pretended seizures and suits, prosecutions and indictments," he said, "until they have been driven almost to the desperation of an open revolt against their persecutors." Representative Sibley of Minnesota also complained of the "unrelenting severity" with which timbermen were pursued; although he admitted that the timber operators in the states farther west were little molested.[51]

Of course, the $5000 appropriated for timber protection in 1872 was a mere bagatelle, wholly inadequate to the needs of the situation, but it was a beginning, and each year following, a like amount was appropriated, until 1878, when it was raised to $25,000.[52] While the appropriation of 1872, and likewise that of 1873 and 1874, was made in connection with the navy, its use was not restricted to the naval reserves; and that there was in Congress some purpose to protect timber in general, is shown by several extra appropriations made in addition to the annual sum provided—$10,000 being thus given in the Sundry Civil Act of 1872.[53]

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[50] Warren, "The Pioneer Woodsman as he is Related to Lumbering in the Northwest," 58.

[51] *Cong. Globe*, 32 Cong. 1 sess., Appendix, 851, 486.

[52] *Stat.* 20, 229.

In the years beginning with 1872, a number of bills appeared in Congress for the protection of timber. In that year, Senator Windom of Minnesota introduced a bill into the Senate,[54] while Representative Haldeman of Pennsylvania introduced two bills into the House, one of which was a comprehensive forestry bill, and was debated at considerable length.[55] This latter measure provided that all land grants should be made upon the express condition that the grantee should preserve ten per cent of the grant in trees, and it failed in the House by the surprisingly small margin of only seven votes. The debates on this bill indicate that conservation had a few champions in Congress, even at this early date.[56]

In 1874, Representative Herndon of Texas, following up the work of the American Association for the Advancement of Science previously referred to (see page 35), introduced a bill "For the appointment of a commission to inquire into the destruction of forests and the measures necessary for the preservation of timber.[57] Representative Dunnell of Minnesota, of the Committee on Public Lands, made a long report favoring the proposition,[58] but the bill made no progress during the Forty-third Congress.

In 1875, Dunnell introduced a bill for the appointment of a commission for inquiry into the destruction of forests.[59] The bill was pigeonholed, but in August of that year he succeeded in hanging a rider on the seed distribution bill, granting $2000, to be spent by the Commissioner of Agriculture for a report on the consumption, importation and exportation of timber, probable supply for the future, best means of preservation and renewal, influence on climate, etc.[60] This appropriation was a result of the agitation by the American Society for the Advancement of Science, and Dr. F. B. Hough of that society was the appointee. In February, 1877, Dunnel secured an amendment to the Sundry Civil Bill, appropriating $2000 to complete the report which Hough was working on,[61] and late the same year, the first volume was completed.[62] Congress evinced further interest in the matter by ordering 25,000 copies of the report for distribution.[63]

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[53] *Stat.* 17, 359.

[54] S. 795; *Cong. Globe,* Mar. 12, 1872, 1588.

[55] H. R. 2197; *Cong. Globe,* Apr. 3, 1872, 2140: H. R. 3008; *Cong. Globe,* Dec. 3, 1872, 15.

[56] *Cong. Globe,* Apr. 17, 1872, 2504; Apr. 30, 2925-2929.

[57] H. R. 2497; 43 Cong. 1 sess.

[58] H. Rept. 259.

[59] H. R. 1310; 44 Cong. 1 sess.

[60] *Stat.* 19, 167.

THE TIMBER CULTURE ACT

The Timber Culture Act of 1873,[64] although it had little effect on forest conditions in the United States, must be classed with conservation measures, because some of the motives behind its enactment were sincerely favorable to the conservation policy. Just as state action on the subject had begun early, so national interest was shown at an early date, and was fostered generally by men from the prairie states. In 1866, Senator Brown of Missouri introduced a bill donating public lands to the "American Forest Tree Propagation and Land Company," for conducting experiments.[65] The same year, Senator Harris of New York introduced a bill "to promote the growth of forest trees on public lands";[66] and this bill was reported from the Committee on Public Lands. Senator Cole of California, in 1867, introduced a bill into the Senate providing for timber culture, and Senator Ross of Kansas brought in several bills in 1869 and 1870.[67] In December, 1871, Senator Wright of Iowa submitted a resolution: "That the Committee on Public Lands be instructed to inquire into the expediency of requiring homestead settlers on prairie lands to cultivate a certain number of trees," and this resolution was agreed to.[68]

It was a Nebraska man, Senator Hitchcock, who introduced the bill, "To encourage the growth of timber on western prairies," on February 20, 1872.[69] This bill, as introduced, required that 120 acres of each 160 acres should be kept timbered for five years, and provided that any settler fulfilling this requirement should have title to the land. It was favored by the Commissioner of the Land Office, Willis Drummond, who, however, thought the amount of timber required was too great, so this was reduced to forty acres, while the time was lengthened to ten years. As finally passed,[70] this act provided that persons planting and maintaining in a healthy condition forty acres of timber on any quarter section of land, might receive a patent for the same. Homestead settlers also might receive patents, if at the end of three years they had for two years kept timber growing on one sixteenth of their claims.

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[61] *Cong. Rec.*, Feb. 23, 1877, 1881.

[62] F. B. Hough, "Report on Forestry." Professor Sargent criticised this report severely. *Nation*, Jan., 1879, 87.

[63] *Cong. Rec.*, Apr. 3, 1878, 2255.

[64] *Stat.* 17, 605.

[65] S. 228; 39 Cong. 1 sess.; *Cong. Globe*, 1588.

[66] S. 396; 39 Cong. 1 sess.; *Cong. Globe*, 3427, 3782.

[67] S. 110; 40 Cong. 1 sess.; *Cong. Globe*, 292: S. 876; 40 Cong. 3 sess.; *Cong. Globe*, 814: S. 50; 41 Cong. 1 sess.; *Cong. Globe*, 29: S. 394, S. 650; 41 Cong. 2 sess.; *Cong. Globe*, 413, 1819.

[68] *Cong. Globe*, Dec. 12, 1871, 68.

A real conservation purpose is indicated by the debates on this bill, and also by the vote in the House, but the law had been in effect only a short time when certain defects were recognized.[71] First of all, it required that the trees be planted the first year, the same year the ground was broken. Furthermore, the entire forty acres must be planted the first year—an initial outlay too great for a poor man. Less objectionable was the fact that it did not permit the entry of less than 160 acres. The law had been in force less than a year when efforts at amendment were made by the author of the original bill—Senator Hitchcock, and by Representative Dunnell—the stalwart defender of timber culture at all times.[72] Amendment was accomplished the following year, covering the defects above noted.[73]

Even as amended, the Timber Culture Act failed to produce the results which had been hoped for. It was found impossible to stimulate tree growth by any such means, and settlers who had entered claims under the act were unable to comply with the conditions prescribed. Relief acts of various kinds were passed. In 1876, an act provided that the planting of seeds, nuts or cuttings should be deemed compliance with the act, and in 1878, the entire measure was overhauled in detail,[74] the chief amendment being a reduction in the amount of timber required from forty to ten acres—a considerable reduction from the 120 acres required by the bill as originally introduced. The results of the law as thus amended will be treated in a later connection. Suffice it to say here, that the law never had any appreciable effect in stimulating forest growth.

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[69] S. 680; *Cong. Globe*, Feb. 20, 1872, 1129.

[70] *Stat.* 17, 605. It may be noted that several years later Ontario, following the recommendations of the American Forestry Congress at Montreal, also passed a law to encourage the planting of forest trees, and voted money for the purpose. *Proceedings*, Am. Forestry Congress, 1882, 29.

[71] *Cong. Globe*, June 10, 1872, 4463, 4464: H. R. 66; 43 Cong. 1 sess.

[72] *Cong. Rec.*, Dec. 10, 1873, 122; Dec. 15, 1873, 207.

[73] *Stat.* 18, 21.

THE FIRST FOREST RESERVE BILL

In connection with conservation measures we may note that even during the seventies, there appears a suggestion of the national forests of later years, in a bill introduced in 1876 by Representative Fort of Illinois: "For the preservation of the forests of the national domain adjacent to the sources of the navigable rivers and other streams of the United States."[75] Nothing was done with the bill, and it indicates no special interest in the matter. even on the part of Fort himself, who introduced it "by request," but it was a precedent, and shows that the idea of forest reserves had been conceived.

UNFAVORABLE LEGISLATION NOT APPLYING SPECIFICALLY TO TIMBER

It is now clear that Congress had, in the period ending with 1878, taken important steps in favor of conservation. The policy of annual appropriations to protect timber had been inaugurated, and in 1878, the appropriation greatly increased; while in 1876, a direct appropriation had been made for forestry investigations; and the creation of forests on the prairies had at least been in good faith attempted. Finally, the policy of forest reserves had been suggested.

There was not, however, an unbroken advance, and while in the above we see the germs of future development along the lines of forest conservation, during the same time other factors of a different variety appeared, factors whose pernicious influence can only now be fully appreciated.

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[74] *Stat.* 19, 54; 20, 113.

[75] H. R. 2075; 44 Cong. 1 sess.

SWAMP LAND GRANTS

In the first place, certain acts had been passed, not directly relating to timber lands, yet of great importance in promoting forest destruction. Of these, one of the most important was the Swamp Land Act of 1850, granting swamp lands to the various states, on condition that the states would drain and reclaim them.[76] This act, with subsequent enactments, was the means of divesting the United States of over 63,000,000 acres of land—much of it timber land. Florida received over 20,000,000 acres under this act—over half the entire area of the state; Michigan received over 5,600,000 acres; and Minnesota over 4,000,000 acres.[77]

The immense swamp land grants were secured largely by fraud, for the advantage of private individuals having political influence with the officials of the various states. Some of the states hired agents to make surveys, giving them as much as 50 per cent of the land they could secure from the Federal government. A great deal of the land was not really swamp land and never needed drainage. Thus, of Florida's vast grant, a great deal was not in the southern part of the peninsula, where the lands were in fact swamp. Instances were even found in which swamp land claims and desert land claims appeared side by side.[78]

Almost none of the swamp land granted to the states was ever reclaimed, and most of it was soon improvidently disposed of and taken up by private holders. Thus, Florida disposed of 4,000,000 acres of her swamp land in one sale, at twenty-five cents per acre. In all, about 16,000,000 acres of the Florida grant were taken up by railroad, canal, and drainage companies. Michigan offered her timbered swamp lands for sale in unlimited quantities, at $1.25 per acre, and granted much of the land which remained unsold to railroad, canal, wagon-road and drainage companies. Nearly 900,000 acres in the Upper Peninsula found its way into the hands of one company—the Cleveland Cliffs Iron Company; and most of the rest was taken

[76] *Stat.* 9, 520.

[77] *Report*, Public Lands Commission, 1905, 156: *Report*, Commissioner of Corporations on the Lumber Industry, I, 253, 254; III, 206-236.

[78] *Reports*, Sec. of Int., 1885, 198, 199; 1890, XIV, XV: *Reports*, Land Office, 1886, 38, 39; 1888, 42-45; 1889, 29: *Proceedings*, Society of Am. Foresters, Nov., 1905, 56, 57: Donaldson, "Public Domain," 220, 221.

up by other large companies. Very little reclamation was ever accomplished, and railroad and canal construction was often only "colorable," the grants being secured, not by *bona fide* fulfillment of the terms of the grant, but fraudulently, through control of the state legislatures.[79]

OTHER STATE GRANTS

All grants to the states operated in much the same way, and under the various grants for education, internal improvements, etc., nearly 100,000,000 acres, some of it timber land, found its way into the hands of private owners and beyond the reach of conservation measures. In at least one state, there seems to have been a lack of good faith in the selection of some of these educational grants. California thus selected approximately 40,000 acres of school indemnity lands for which no valid bases were assigned, and as late as 1908, had failed to adjust the matter properly.[80] Some of the states sold direct to the lumbermen, without limitation as to amount. Others allowed entries only in limited amounts to persons alleging intent to settle and taking oath that they had made no agreement to transfer the land to others. Yet, even in such states, either by the looseness of the laws or by the violation of them, large holdings of timber lands were built up from state lands. Of course, such of the state lands as were real agricultural lands were, for the most part, taken up by *bona fide* settlers, but that has not been the usual history of timber lands.[81]

[79] "Lumber Industry," I, 244, citations in footnotes; III, 198-207, 223-236: Palmer, "Swamp Land Drainage," Univ. of Minnesota, "Studies in the Social Sciences," No. 5.

[80] *Report*, Land Office, 1908, 16. See also Orfield, "Federal Land Grants"; Univ. of Minnesota, "Studies in the Social Sciences," No. 2.

[81] In California one holder, Thomas B. Walker of Minneapolis, in later years acquired about 100,000 acres of state lands, while three other holders together secured 65,000 acres. In Idaho the Potlatch Lumber Company acquired the timber rights on over 77,000 acres of state lands. In Oregon two large timber holdings were later found to consist almost entirely of state school lands in sections 16 and 36. A few of the states, it should be said, displayed some traces of wisdom in dealing with their lands. Thus, Minnesota retained nearly one third of her total grant of 8,150,000 acres, and, from the sale of part of the other two thirds, and from timber and ore leases, the state finally received about $27,000,000; while the mineral rights on the ore lands will, it is estimated, bring the state a very large sum—just how much no one knows. The state of Washington still retains from its grants a very large body of valuable timber lands, and Montana and Idaho hold smaller amounts. ("Lumber Industry," I, 252-255; II, 92, 125; III, 214.)

Agricultural college scrip was often sold outright in large blocks. One company claimed to have bought over 3,000,000 acres of the scrip issued to Kentucky, Indiana, Maryland, North Carolina, New Hampshire, Massachusetts, Ohio, and Pennsylvania—two fifths of the entire amount of scrip granted to these states.

THE PREËMPTION, COMMUTATION HOMESTEAD, AND DESERT LAND LAWS

Some of the general land laws of the Federal government proved quite as iniquitous as the grants to the states. The Preëmption Law and the commutation clause of the Homestead Act were both used a great deal by timbermen; and in 1877, the Desert Land Law gave one other means of securing timber.[82]

Preëmption rights had been recognized in certain cases even as early as 1799, but the general Preëmption Act dates from 1841.[83] Originally this system, by allowing title to go to actual settlers, had put a premium on home making; but when the Homestead Act was passed in 1862, there was no further need for the Preëmption Law, and since, under its provisions, no permanent residence was required, it was used extensively by timbermen and others to gain title to public lands.

In recognition of the fact that misfortune or change of circumstances might befall a settler, Congress provided by a clause in the Homestead Act that any claimant, after six months' residence and cultivation, might "commute" his entry, that is, purchase the land at $1.25 per acre instead of getting it free at the end of five years of residence and cultivation. There was no such thing as a separate and distinct law allowing entry with intent to commute. The applicant had to swear that he was taking the land in good faith, for the purpose of making a home; but the commutation clause allowed him to buy the land if his original plans should change. Like the Preëmption Law, the commutation clause of the Homestead Act was often, perhaps generally, used fraudulently. (See pages 79, 80.)

Less important than the Preëmption Law and the commutation clause of the Homestead Act, in promoting the alienation of timber lands and the destruction of public timber, was the Desert Land Act of 1877, yet it must be mentioned here because it was sometimes used by timbermen. The process under this act was to make entry, with no intention of acquiring title, strip the land of its timber, and move on to other fields.[84]

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[82] *Stat.* 19, 377.

[83] *Stat.* 1, 728; 5, 453.

Another factor of considerable influence upon the public timber land was the system of land bounties for military service. Under various acts, warrants were issued for a total of over 61,000,000 acres of land. By the provisions of the earlier acts the warrants were unassignable; but in 1852 Congress passed an act making them assignable, and warrants for nearly 35,000,000 acres were issued after this. These warrants were bought up in large quantities by speculators, and in this way large tracts of land, some of it timber land, were taken up by private holders.[85]

PUBLIC SALE

Public sale was from the earliest times a common method of land disposal, and in the period of nearly a century during which sale was permitted, considerable areas were taken up, particularly in the South. Since there was no limit to the amount of land which could be acquired under the laws for public sale and private entry, those laws were used a great deal by timbermen wherever timber land was obtainable under their provisions.[86]

In some of the southern states, timber lands were for a time very effectually locked up from sale, if not from theft. At the close of the Civil War, in order to preserve homesteads for the negro freedmen, Congress had passed a law providing that in Alabama, Mississippi, Louisiana, Arkansas and Florida, lands should be disposed of only under the provisions of the Homestead Act.[87] This law affected much of the finest timber in the country, since much of the southern land was wholly unfit for cultivation, and therefore could not be taken up under the Homestead Act. Of course, such a provision could not long withstand the demands of the timbermen.

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[84] *Report*, Land Office, 1881, 377.

[85] "Lumber Industry," I, 258.

[86] *Ibid.*, I, 185, 256-258; II, 147-149; III, 197, 213, 214: *Report*, Land Office, 1868, 93; 1872, 26; 1873, 12.

[87] *Stat.* 14, 66, 67.

In 1871, Representative Boles of Arkansas tried to secure the repeal of the act of 1866, but failed. In 1875, Senator Clayton of the same state brought in a similar bill, and after considerable debate, succeeded in getting it through Congress.[88] Since the Clayton bill was to determine the fate of some of the finest timber in the United States, it is pertinent to note some of the points urged in the debates.

Several reasons were advanced why the southern timber lands should be offered for sale. In the first place, the southern men felt that the South should be treated like the rest of the country, should be opened up to exploitation or "development," like the other timbered sections in the North and West. "What we ask, Mr. President," said Clayton, "is that the people of Arkansas, of Alabama, of Mississippi, of Louisiana, and of Florida may have the privilege of developing the timber resources of their states the same as the other Western States have. . . . The passage of this bill will add to the wealth of the citizens of the states, furnish productive labor to their citizens, bring immigration to these states, open up a means of supplying the vast prairie land west of us with lumber, and allow the states the privilege of levying a tax on these lands, which are now of no benefit to them, but rather an obstacle in the way of their development."

It was argued by several men in the Senate that these lands would be better protected from fire and from trespass if they were sold and taken up by private owners. "Let the lands go into the hands of individuals," said Clayton, "and they will have an interest to prevent the destruction of the timber by fire and otherwise." Senator Windom of Minnesota likewise thought that only private ownership would ever secure protection for the forests. Senator Clayton showed how the Homestead Act was used fraudulently, how entrymen would go to the land office and upon payment of a five dollar fee would enter the land and despoil the timber, with no intention of proving up for a homestead. "Our criminal legislation is for rogues and criminals," he declared. Senator Jones of Florida likewise pointed out how the system prevailing favored the "trespasser, and the trespasser alone."

Even as early as this, Alabama was developing the manufacture of iron and steel, and Representative Hewitt favored the sale of lands because he thought it would stimulate the development of this indus-

[88] *Cong. Globe*, Feb. 11, 1871, 1157: S. 2; 44 Cong. 1 sess.

mark "Iron men will not invest their money in furnaces, unless they can first secure large bodies of coal lands, and they cannot be had there unless Congress passes the bill now under consideration."

Opposition to the bill came largely, of course, from the eastern states, although a few scattered voices were heard from various parts of the country. Senator Edmunds of Vermont, one of the earliest conservationists in Congress, was strongly opposed to the policy of selling valuable timber lands in unlimited quantities for $1.25 per acre. "That sort of thing," he declared, "does not do the community in which the lands are, any sort of good; it does not do the public any good, because the actual amount of revenue derived from these public sales is, of course, very small." The bill, as first proposed, provided for sale at $1.25 per acre, but Senator Edmunds offered an amendment providing that the land must first be offered at public auction. The idea of this amendment was, of course, to secure something like the real value of the land, but several of the southern men opposed it on the ground that the offering of lands at public auction involved a considerable expense and loss of time, while the price realized was never more than $1.25 per acre, anyhow. This amendment was finally accepted, however. Senator Ingalls of Kansas pointed out a rather glaring inconsistency in the attitude of the southern men, who were enlarging upon the great need for this law, and upon the great demand there was for the land to be opened up, while in the next breath they stated that the land would never be worth over $1.25 per acre.

The opposition was based on various grounds. Senator Edmunds thought that the price was too low, and probably he did not favor sale, anyhow. Senator Oglesby of Illinois, and Representatives Holman of Indiana and Brown of Kansas clung to the idea of settlement under the Homestead Act, as representatives of prairie states naturally might. They did not see that timber lands and agricultural lands present two entirely different problems and that their disposition involves entirely different principles. The Homestead Act was the only law which should ever have been passed for the disposition of ordinary agricultural lands; but it was wholly unsuited to timber lands.

The danger of promoting monopolistic control of the timber supply, by selling the land thus in unlimited amounts, was clearly pointed out in both houses of Congress. Representative Holman was particularly apprehensive on this point; in fact, in his fear of lumber monopolies he failed to appreciate the advantages of large units in the lumber industry, and thus failed to foresee clearly the line of development which that industry was going to follow in succeeding decades. "I may be told," he said, "that this wealth, which may be monopolized, consisting in boundless regions of timbered lands, will not be made available unless these lands are sold in large tracts. I do not think, however, that the argument can be sustained. It is very possible for these lands to be held in smaller quantities and still be made available by the energy of the single citizen. This policy would make no great fortunes. It would give capital no opportunity to rapidly multiply itself; but it would do what is infinitely better, it would give multitudes of men an opportunity by their own labor to improve their fortunes." Just what kind of a lumber business Holman had in mind here, it would be rather difficult to say, but it certainly was not what we now recognize as the most efficient type of lumbering operations.

Perhaps the most advanced stand yet taken in Congress on the conservation question, was that of Senator Boutwell of Massachusetts. Senator Boutwell offered an amendment to the Clayton bill, providing for the appraisal and sale of the timber *without the land*, at not less than appraised value, in tracts of not over 320 acres. The timber was to be removed within three years, and no one was to get a second assignment until he had exhausted his first 320 acres. A small amount of each species of timber was to be left standing on each plot, and all live oak and red cedar was to be reserved unless opened to exploitation by special order of the President. Thus, as early as 1876, at least one man in Congress had grasped clearly the principle which was later to govern our forest policy—sale of the timber with a reservation of the land.

In his defense of his amendment, Senator Boutwell used some arguments which sound very much like other conservation arguments of the period, but some of his ideas sounded unusual depths of economic philosophy for his time. "It is perhaps too early in the life of the country," he said, in closing his speech before the Senate, "to suggest that in two particulars we are moving in that clear path which is marked on every page of the history of the effete and extinct nations of the world; in the impoverishment of the land, and in the waste of the resources of nature for the support of animal life, which goes on today in every section of the country. . . . I am of those who believe that nothing which has been granted by nature is more essential to the comfort, to the health, to the prosperity, and to the increase of the human race, except the preservation of the soil itself, than the preservation of the forests. This bill is a proposition to invite all the speculators and adventurers of the country to enter upon the work of destroying the forests of the country."

Senator Boutwell's amendment was attacked on all sides. Senator Howe of Wisconsin frankly admitted that he was not interested in the needs of posterity. "Mr. President," he announced, "I am, as well as my judgment informs me, ready to labor by the side of the Senator from Massachusetts for the welfare of the government today, and of the generation now existing; but, when he calls upon us to embark very heavily in the protection of generations yet unborn, I am very much inclined to reply that they have never done anything for me, and I do not want to sacrifice too much." Senator Windom of Minnesota thought that only sale of the lands could ever secure their protection, and that Boutwell's amendment would hasten forest destruction, while the appraisal would be too expensive. As he expressed it, there would have to be "as many appraisers as there were locusts in Egypt."

After some debate, Senator Boutwell's amendment was rejected, and the bill itself passed both houses, the South voting almost unanimously in favor of it.[89] Thus Congress opened up to sale vast tracts of the rich yellow pine forests of the South, and during the latter eighties these lands were rapidly taken up by timbermen and speculators.

RAILROAD LAND GRANTS

While the history of the railroad land grants is too vast and complicated a matter for such a treatise as this, some account of it must be given, for the railroad land grants were the most important factor in producing the concentration in timber ownership which characterizes the present situation. Railroad grants have been far more important than any of the other public land laws in their influence on timber lands.

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[89] *Stat.* 19, 73. This bill was not signed by the President, probably because he did not approve it.

The era of Federal land grants for railroads covered the period from 1850 to 1871, and during that time the government granted a total of 190,000,000 acres of land for the encouragement of railroad construction—an area greater than that of France, England, Scotland, and Wales—greater than the states of Ohio, Indiana, Illinois, and Michigan combined; greater than the New England and North Atlantic states, with Maryland, Virginia, West Virginia, and Ohio thrown in—almost an empire. These figures cover only Federal land grants to railroads. They do not include Federal grants of about 9,000,000 acres for wagon roads, canals, and river improvements; nor the grants made by the state of Texas, amounting to over 33,000,000 acres; nor do they include the millions of acres given to railroads, wagon roads, and canal companies by the individual states.

It is true that much of the land granted was in the non-timbered regions, but some of the grants traversed important timbered regions. The Northern Pacific grant crossed the timber belt of western Montana, northern Idaho and northeastern Washington, and also the great Pacific coast fir belt in western Washington. The grants later controlled by the Southern Pacific, before their forfeiture in 1915, swept through the Pacific coast fir and pine belts from Portland southward to Sacramento. The Atlantic and Pacific grant in northern Arizona and New Mexico included considerable areas of western pine; and the Union Pacific had smaller timbered areas in Wyoming, Colorado, and Utah. The grants in Michigan from about the forty-third parallel northward were in the white pine belt. So, also, were many of the grants in Wisconsin, and in the northern and northeastern part of Minnesota, covering perhaps a third of the granted area in that state. In the southern yellow pine belt were all the grants in Louisiana, Mississippi, and Florida, and most of those in Arkansas and Alabama. A few of the grants were in hardwood regions.[80]

The importance of the railroad grants as a means of timber land alienation was augmented by the passage of the Indemnity Act of

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[80] "Lumber Industry," I, Ch. VI.

1874, which provided that if land included in a railroad grant was found in the possession of settlers, the railroad might select other lands in lieu of it.[91] This was an equitable and innocent enough provision, apparently, but it enabled some of the railroads to acquire more valuable lands than their grants really entitled them to.

UNFAVORABLE LEGISLATION APPLYING SPECIFICALLY TO TIMBER

The various measures above discussed did not apply specifically to timber lands. Of legislation applying *specifically* to timber lands, and injurious thereto, perhaps the earliest example was the grant of materials, including timber on the public domain, for the purpose of railroad construction. In 1822, Illinois was granted the right to use materials for the construction of a canal, and in 1835, a railroad from Tallahassee to St. Marks, Florida, was given materials for 100 yards on each side of the track. In 1838, another Florida railroad was given materials within twenty rods of the track, while a general right-of-way act, in 1852, gave to any railroad chartered within ten years, materials without any distance restriction; and an act in 1872, granting a right of way to the Denver & Rio Grande, gave materials for construction *and repair*. Here we can see increasing Congressional generosity. Several acts in 1873, 1874, and 1875, gave materials for construction, and in 1875 that privilege was made general.[92] It is true that in some cases this generosity was perhaps wise, but great abuses arose, and a great deal of public timber was destroyed under cover of these provisions.

THE FREE TIMBER AND TIMBER AND STONE ACTS

The year 1878 marks the passage of two acts of great importance in promoting the destruction of timber—the Free Timber Act, and the Timber and Stone Act. In order to understand the passage of these acts, however, it will be necessary to note briefly the status of the public lands laws as they related to timber.

Previous to the year 1878, no distinction was made between timber lands and other lands, so that timber lands could be acquired from the government in several different ways; by public sale, by private sale, under the Homestead Act, under the Preëmption Law, and by the use of military bounty warrants or other forms of land scrip. Public sale, as above pointed out, had been one of the earliest methods of land disposal, but after the adoption of the Homestead Act, in 1862, public sale was not favored, and at this time very little land had been offered for sale except in the South—in Alabama, Arkansas, Florida, Louisiana, and Mississippi, where all of the surveyed public lands were offered under the act of 1876. No land could be entered at private sale unless it had first been offered at public sale, so that about the only lands available at private sale, were in the southern states.[93] The Homestead and Preëmption laws had been devised for agricultural lands, not for timber lands, and the acquisition of timber lands under their provisions was often fraudulent—indeed the acquisition of much of the timber land of the West was *necessarily* fraudulent, since it was not fit for agriculture when cleared.

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[91] *Stat.* 18, 194.

[92] *Stat.* 3, 659; 4, 778; 5, 253; 10, 28; 17, 339; 18, 482.

There was always a considerable amount of land scrip of various kinds, which could be used in acquiring title to public lands, but much of this was, of course, in the hands of speculators, and so was obtainable generally only upon the payment of a speculative price. In securing land in this way it was necessary also to hunt out the holders of the scrip; and finally, some of the scrip, as for instance the military bounty warrants, was available for location only upon public land which was subject to private cash entry, and for this reason was of no value in many sections of the country.[94]

Thus, there was in 1878 no general legal and honest way of acquiring public timber lands, or the timber itself, in many parts of the United States; and when appropriations for the suppression of timber depredations became available, and under Carl Schurz, the administration began a policy of law enforcement sufficiently vigorous to discourage timber stealing, those wanting timber sought other means of acquiring it. The result was the passage of the Free Timber Act and the Timber and Stone Act. The former provided free timber for settlers, and the latter provided for sale of the lands.

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[93] Somewhat later than this, considerable land seems to have been offered at public sale in various parts of the country, and in some sections, as, for instance, Wisconsin and the Upper Peninsula of Michigan, large tracts were taken up at public and private sale. (*Report*, Public Lands Commission, 1905, 199 et seq.: "Lumber Industry," I, 185, 256-258; II, 147-149; III, 197, 213, 214: Donaldson, "Public Domain," 206, 207, 415, 1159.)

[94] Donaldson, "Public Domain," 223, 232-237, 289, 290, 950, 958, 959, 1276: "Lumber Industry," I, 258.

As long as the law against timber cutting was not enforced, there had been no need for a free timber law, but when the policy of law enforcement was inaugurated, the response of the West was fairly prompt. As early as 1869, Representative Johnson of California had introduced a bill for the relief of persons taking timber from the public lands,[95] but the bill made no headway, and Congress gave little evidence of interest in the matter for several years. In 1876 and in 1878, Chaffee of Colorado introduced bills into the Senate: "Authorizing citizens of Colorado, Nevada and the Territories to fell and remove timber on the public domain for mining and domestic purposes";[96] and in the latter year, by the help of Senator Sargent of California, got one of his measures through the Senate without difficulty. In the House, Patterson of Colorado, Page of California, and Maginnis of Montana pushed the bill through, although not until Fort of Illinois compelled them to agree to an amendment giving the Secretary of the Interior control over the licenses to cut timber. As thus amended, Chaffee's bill passed with very little opposition, and became a law on June 3, 1878.[97] Some time before Chaffee's bill was signed, Representative Wren of Nevada introduced a similar bill into the House, but it received no attention.[98]

Before this bill reached the House, however, a provision had been enacted as a rider to a special appropriation bill, which accomplished, in the territories of the United States, practically the same thing, *for one year*. To the clause appropriating $7000 for investigating land entries, a proviso was attached, that where timber lands were not surveyed and offered for public sale, none of the money appropriated should be used to collect a charge for timber cut for the use of actual settlers.[99] Much of the land had not been surveyed, and very little in the West had been offered for sale, so that the appropriation made for

[95] H. R. 563; 41 Cong. 2 sess.; *Cong. Globe*, p. 98.

[96] S. 1078; 44 Cong. 2 sess.: S. 20; 45 Cong. 1 sess.

[97] *Cong. Rec.*, May 9, 1878, 3328: *Stat.* 20, 88.

[98] *Cong. Rec.*, Mar. 11, 1878, 1646.

[99] *Stat.* 20, 46.

timber protection was very closely circumscribed in its use. The effect of the proviso was clinched by another provision, that all moneys collected for depredations should be covered into the treasury like other public land receipts. Money thus collected from the sale of stolen timber had long been a fund for the prosecution of trespassers.

There was much justice in the demand of the western states for free timber. In many parts of the West there were apparently inexhaustible forests, some of the timber ripe or rotting, and with no apparent probability that the government would soon, if ever, make any use of it. In some sections, too, coal was not mined and was very expensive. Under such circumstances there was little apparent justice in denying the miners and settlers the use of some of the timber. Furthermore, the people of the West felt that the timber growing in the West was *their own* timber, and many of them were unable to see why they should not do with it as they pleased, just as the people of the East had done in an earlier period.

Had there been a law permitting the sale of timber on the public lands, by means of a system of licenses, there would have been no real need for legislation at this time; but no such policy had ever received serious consideration in political circles in the United States, and when Congress acted, it produced on the same day, June 3, 1878, the Free Timber Act just described, and the Timber and Stone Act, the latter of which launched the United States definitely upon the policy of turning over timber lands to private ownership.

Considering public sentiment, and even scientific opinion, as it was in 1878 and previously, it is not surprising that Congress should have provided for the sale of timber lands. It seems strange rather that the law should not have been passed sooner, for the policy of sale had been recommended by almost all writers on the subject. In 1870, R. W. Raymond, Commissioner of Mining Statistics, in his complaint regarding timber depredations, said: "The entire standing army of the United States could not enforce the regulations. The remedy is to sell the lands."[100] In 1874, the Commissioner of the Land Office, S. S. Burdett, recommended in his annual report that the lands should be sold; and in this recommendation the Secretary of the Interior concurred.[101]

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[100] H. Ex. Doc. 207; 41 Cong. 2 sess., 343.

[101] *Report*, Sec. of Int., 1874, XVI, 6.

The Public Lands Commission of 1880 favored the sale of timber lands, like Secretary Delano, on the ground that private ownership would provide the best protection.[102] Even the committee of the Association for the Advancement of Science appointed in 1873, reported: "We do not recommend the undertaking of this industry by the government;" although they added qualifications that could fairly be interpreted to favor a system of national forests. F. B. Hough of that society, in his first report on forestry in 1877, also said that our government could not undertake the management of forests, because the officers would be politicians instead of foresters; yet he spoke favorably of the Canadian system of retaining the land and selling stumpage.[103] In the debates on the bill for opening up the lands of the South, almost everyone favored sale of the lands, as the best means of securing protection. Secretary Schurz was always in favor of government reservation of timber lands, but he said little about it, perhaps realizing that there was no possibility of such a policy being adopted.[104]

It is not really surprising that in the seventies, sale should have seemed the only practicable policy in dealing with timber lands. The public domain covered an immense area of over a billion and a quarter acres, more than a billion acres of it unsurveyed.[105] No surveys having been made, there is no record of the amount of timber land included in this total, but the fact that about 150,000,000 acres of forest reserves were later carved out, after private individuals had taken the best land, indicates that there was a vast area of timber land at this time. The wisdom of government management of such an enterprise might well be questioned, especially since Congress had never evinced the capacity to deal efficiently and intelligently with the lands, while various scandalous exposures since the Civil War had shown a low standard of political morality which promised little for Federal management of anything. With public opinion almost everywhere favoring the policy of sale, and only a few doubtful voices opposing, a law to carry out that policy was inevitable.

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[102] Donaldson, "Public Domain," 542.

[103] Hough, "Report on Forestry," I, 194.

[104] *Cong. Rec.*, Feb. 2, 1876, 816-818; Feb. 7, 906; Feb. 8, 936; Feb. 15, 1083-1090; Apr. 13, 2461; Apr. 19, 2603 et seq.: *Report*, Sec. of Int., 1877, XVI, XIX.

[105] *Report*, Sec. of Int., 1878, 5.

As early as 1865, Senator Conness of California introduced a bill for the sale of timber lands in that state, but the Committee on Public Lands asked to be discharged from its consideration. In 1871, Delegate Garfielde of Washington and Representative Sargent of California introduced bills for the sale of timber lands in the coast states, and one of these measures passed the House, as did also a bill introduced by Slater of Oregon, proposing to give settlers the right to buy forty acres of timbered lands for each 160 acres of untimbered land occupied by them. Several timber sale bills appeared in the next few years, most of them fathered by western men—Representatives Page and Pacheco of California, Maginnis of Montana, Patterson of Colorado, and Kelley of Oregon. Measures were also introduced, however, by Dunnell and Averill of Minnesota, and even by men from farther east—Representative Sayler of Ohio and Senator Boutwell of Massachusetts.[106] Some of these bills provided sale at appraised value, or at a fixed minimum, and in the debates on Senator Kelley's bill, an amendment was offered providing that lands must be offered at public sale before they could be bought otherwise; but this amendment was defeated in the Senate by a vote of 36 to 9, its meager support coming mainly from the eastern states.[107]

As already stated, Sargent's bill of 1871, and Slater's measure of the following year passed the House of Representatives. Two years later the bill originally introduced by Page of California, providing sale at $2.50 per acre, also passed the House without opposition; and in 1878, a bill was introduced by Sargent, providing for sale in California, Oregon, Washington, and Nevada. This bill was intended as a supplement to the Free Timber Act, which did not apply to the coast states, California having been omitted from the provisions of the latter act at the request of Sargent himself; and it passed both houses with scarcely an opposing voice.[108]

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[106] S. 379; 38 Cong. 2 sess.; *Cong. Globe*, Feb. 16, 1865, 811: H. R. 2930, H. R. 3005; 41 Cong. 3 sess.: H. R. 274; 42 Cong. 1 sess.: *Cong. Globe*, Feb. 11, 1871, 1156: H. R. 3101; 42 Cong. 3 sess.: H. R. 410, S. 471; 43 Cong. 1 sess.: H. R. 4430; 43 Cong. 2 sess.: H. R. 323, H. R. 660, H. R. 1191, S. 6; 44 Cong. 1 sess.: H. R. 797, H. R. 1154; 45 Cong. 1 sess.: H. R. 2658, H. R. 3981; 45 Cong. 2 sess.

[107] *Cong. Rec.*, Feb. 16, 1876, 1101; Feb. 21, 1187-1189.

[108] *Cong. Rec.*, Feb. 22, 1875, 1597, 1598; Apr. 18, 1878, 2640; Apr. 25, 1878, 2842; May 11, 1878, 3387, 3388.

CONCLUSION

Thus it appears that at the end of the year 1878, most of the factors which were to determine the fate of our American forests were already at work. Some steps had been taken in the direction of conservation. A few private individuals, associations and societies had evinced considerable interest in the matter. Some of the states had taken a few wobbly steps in the direction of forest protection and forest planting; while the Federal government had appropriated funds for protection and investigation, and had made an unsuccessful attempt at timber culture. These factors must not be given too much emphasis, however. Conservation sentiment, although destined to grow in influence within the next few decades, had as yet acquired little momentum; and in 1878, it seemed to be developing less rapidly than the anti-conservation spirit which had arisen to meet it. State action had been generally ineffective, Federal efforts vacillating and often futile, and all tree planting worse than a failure.

Forces unfavorable to conservation had on the other hand attained formidable power. Swamp land grants, grants for education, military bounties, and the whole hydra-headed system of grants and concessions to the railroads had provided for the alienation of several hundred million acres of land—some of it timber land. The Preëmption, Commutation Homestead, Desert Land, Public Sale, and Private Entry laws were available to timbermen for the acquisition of remaining tracts; and there was no reason to expect that any of these laws would soon be repealed. The Free Timber and Timber and Stone acts completed the category of iniquitous statutes. The manner in which these various factors operated to accomplish the destruction or alienation of most of the valuable public timber during the following years, and the manner in which the conservation forces finally saved to the American public a frazzled remnant of their original magnificent heritage, will constitute the subject-matter of the following chapters.

CHAPTER II

THE PERIOD FROM 1878 TO 1891: FROM THE PASSAGE OF THE TWO TIMBER ACTS TO THE FOREST RESERVE ACT: WHOLESALE TIMBER STEALING

Before entering into a discussion of the operation of the timber land laws during this period, it will be necessary to examine carefully the two laws of June 3, 1878—the Free Timber Act and the Timber and Stone Act. They were not only passed the same day, but may be regarded in some respects as a single act with two parts, each providing timber disposal on a different section of the public domain.[1]

THE FREE TIMBER ACT, PROVISIONS AND INTERPRETATION

The Free Timber Act of 1878[2] provided that residents of the Rocky Mountain states—Colorado, Nevada, New Mexico, Arizona, Utah, Wyoming, Dakota, Idaho, and Montana—might cut timber on mineral lands, for building, agricultural, mining, or other domestic purposes, subject to such regulations as the Secretary of the Interior might prescribe.

The main purpose of the act seemed clearly to be the granting of free timber to miners, although settlers were included. Beyond this general purpose, however, very little in the act was perfectly clear. It was loosely and unskillfully drawn, and abounded in unnecessary and indefinite phrases and clauses of the "and-so-forth" character. The privilege conceded by it was limited to citizens of the United States, "and other persons," resident in certain states, "and all other mineral districts of the United States." It allowed "timber and other trees" to be cut for building, agricultural, mining, "or other domestic purposes," subject to such regulations as the Secretary of the Interior might prescribe for the protection of the timber, "and for other purposes."

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[1] Nevada was the only state to which both acts applied.

[2] *Stat.* 20, 88.

Considerable litigation soon arose concerning the meaning of the phrase, "all other mineral districts of the United States," certain mining companies in Oregon and California claiming that this phrase extended the provisions of the act to mining districts anywhere in the United States. Secretary of the Interior Teller ruled that mineral districts anywhere were included within the provisions of the act, but the courts held that, while the phrase was some evidence of an intention on the part of Congress to extend the operation of the act beyond the limits of the states and territories named, yet, since there was nowhere any district known as a "mineral district," nor any method known to the law by which such a district could be established, the provisions of the law could not be so extended.[3]

The law was not only ambiguous but, strictly interpreted, would have applied to a very small portion of the public timber lands.[4] It permitted the removal of timber from *mineral* lands. Perhaps not one acre in 5000, in the states and territories named, was mineral, and hardly more than one acre in 5000 of what was mineral was known to be such.[5] The lands must be mineral, and furthermore, "not subject to entry under existing laws of the United States except for mineral entry." Interpreting this, the Supreme Court of the United States held that in order that mineral lands should be excepted from preemption and settlement, "the mineral must be in sufficient quantity to add to their richness and to justify expenditure for its extraction, and *known to be so*."[6] In a later decision of the Supreme Court, Justice Peckham said: "The right to cut is exceptional and narrow. . . . The broad general rule is against the right. The presumption in the absence of evidence is that the cutting is illegal."[7]

These decisions were made later than the period under consideration, so, of course, were not yet binding, but they differed little from the instructions issued by Secretary Schurz in 1878, in which he stated: "This act will be enforced against persons trespassing upon any other than lands which *are in fact mineral* or have been withdrawn as such."[8]

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[3] "Land Decisions," I, 600: U. S. vs. Smith; 11 Fed. Rep., 487; U. S. vs. Benjamin; 21 Fed. Rep., 285.

[4] *Report*, Sec. of Int., 1878, XIII.

[5] Donaldson, "Public Domain," 543.

[6] Davis vs. Weibold; 139 U. S., 507, 519.

[7] No. Pac. R. R. Co. vs. Lewis; 162 U. S., 366, 376. See also U. S. vs. Reed; 12 Sawyer, 99, 104; and U. S. vs. Plowman; 216 U. S., 372.

The Free Timber Act would thus have been of extremely limited effect if it had been strictly applied and its limitations enforced, but it was not so applied and its provisions were not enforced. Secretary Schurz's regulations seem sufficiently severe. He not only interpreted the term "mineral" very strictly, but also directed that no trees less than eight inches in diameter should be taken.[9] Doubtless, too, he enforced his regulations as vigorously as funds permitted. In 1882, however, H. M. Teller of Colorado became Secretary of the Interior, and his enforcement of the timber land laws was such as might have been expected of a western man, with a strong western bias on land questions. His effort to broaden the scope of the Free Timber Act has been noted;[10] and his general policy was to allow lumber dealers, mill owners, and railroad contractors to cut timber even for commercial purposes, and for sale as well as for use.[11]

With the inauguration of President Cleveland, a new spirit entered the Land Department, and, under Secretary Lamar and Commissioner Sparks, the policy of Teller was completely reversed. Another circular of instructions regarding the Free Timber Act was issued, perhaps even more strict than that of Schurz.[12] This circular directed that the "land must be known to be of a strictly mineral character" in order to be included in the provisions of the act. This, it will be observed, anticipates the decision in Davis vs. Weibold by nearly five years. Also in its regulations regarding sawmills operating under the act, this circular evinces the most explicit care. Every manager of a sawmill was required to keep a record showing when and by whom all timber was cut, describing the land carefully and stating the evidence upon which it was claimed to be mineral, etc. The manager was forbidden to sell any timber or lumber without taking from the purchaser a written agreement that it would not be used except for the purposes allowed by the act. Every purchaser was required to file a certificate under oath that he was purchasing the timber or lumber exclusively for his own use, and for the purposes enumerated. To make enforcement easier, the books, files, and records of the mill men were required to be open to the inspection of the officers and agents of the department; while, to prevent waste and fire destruction, mill owners were required to utilize all of each tree that could profitably be used, and to remove the tops and brush.

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[8] *Report*, Land Office, 1878, 119.

[9] *Ibid.*

[10] Cross Reference, p. 63.

[11] *Report*, Sec. of Int., 1885, 235: "Land Decisions," I, 597. Secretary Teller was himself the owner of a number of mines in the West, and so was in a position to profit by the loosest possible interpretation of the Free Timber Act. It has been stated that he got title to some of his mining lands while Secretary of the Interior, but the writer has no absolute proof of this statement. (*Cong. Rec.*, Jan. 29, 1906, 1883; Feb. 26, 1909, 3227.)

[12] *Report*, Sec. of Int., 1887, 552: "Land Decisions," IV, 521.

EVIL EFFECTS

Unfortunately, the enforcement of these regulations was generally very lax. A force of from fifteen to fifty-five special agents[13] could not protect several hundred million acres of timber land, even when the administration favored law enforcement, and in years when the administration did not favor that policy, very little could be expected. Wealthy companies employed large forces of men to cut and remove the timber, little if any attention being paid to the character of the land, or to the size of the trees. Millions of dollars worth of timber was reported to have been used in the Comstock mines between 1870 and 1893, some of it taken under the provisions of the Free Timber Act. In 1887, suit was pending against one man in Colorado for 39,000 cords of wood alleged to have been cut from non-mineral lands. Timber was taken, not only by lumbermen and by mining companies, but by smelting companies, which found charcoal combined with coke a quicker means of smelting than coke alone, and cleared vast tracts, sometimes, it is stated, burning over large tracts in order to get the dead timber, and then selling charcoal in the public market. Along the Colorado Midland Railway, long stretches of mountainsides were cleared of their forests, and later the charcoal kilns in the vicinity were deserted because of the exhaustion of the supply of wood.[14]

[13] *Reports*, Sec. of Int., 1879, 26; 1890, 80.

[14] *Report*, Land Office, 1888, 54: Forestry Division, *Bul.* 2, 1889: *Proceedings*, Am. Forestry Assoc., 1891-92-93, 132: *Report*, Sec. of Int., 1887, 566, 567: *Arboriculture*, Mar. 3, 1903, 91-93: Bird, "A Lady's Life in the Rocky Mountains," 226. In

The iniquitous effects of the law were pointed out from the very first. Even before its passage, Commissioner Williamson wrote to Secretary Schurz: "This bill is equivalent to a donation of all the timber lands to the inhabitants of those states and territories. The machinery of the Land Office is wholly inadequate to prevent the depredations which will be committed."[15] Secretary Schurz foresaw the same results. "It will stimulate a wasteful consumption beyond actual needs and lead to wanton destruction," he said, "for the machinery left to this department to prevent or repress such waste and destruction through enforcement of the regulations, will prove entirely inadequate, and as a final result, in a few years the mountainsides in those states and territories will be stripped bare."[16]

In his annual report the following year, Secretary Schurz said: "The predications made last year by myself and the Commissioner of Land Office have already, in many places, been verified by experience. I repeat my earnest recommendation that the act be repealed."[17]

While Schurz thus complained of the disastrous effects of the law on the public timber, his successor, Samuel J. Kirkwood, like the Public Lands Commission of 1880, seemed concerned rather because the act was not more general in its scope,[18] and the next Secretary of the Interior, H. M. Teller, usually favored timber concessions of every kind.

EXTENSION OF FREE TIMBER PRIVILEGES

Although the preservation of the public timber demanded the speedy repeal of this act, there was, during the decade or more fol-

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January, 1900, Secretary of the Interior Hitchcock ruled that the use of timber for smelting was not permissible under the Free Timber Act; but only a few months later Commissioner Richards ruled that smelting was "manufacturing," and that therefore timber might be taken under the Permit Act of 1891—a second "free timber" act, extending the provisions of the act of 1878. Thus it seems that, but for a few months during the year 1900, free timber was available for use in smelters, although the writer is not absolutely certain as to the status of the matter during this time. A decision of a Secretary of the Interior would not ordinarily be reversed by a later Commissioner of the Land Office. ("Land Decisions," XXIX, 572: Compilation of Public Timber Laws, 1903, 91-93.)

[15] *Report*, Sec. of Int., 1878, XIII.

[16] *Ibid.*, XIV.

[17] *Ibid.*, 1879, 28.

[18] H. Ex. Doc. 46; 46 Cong. 2 sess., XXXII, XXXIII: *Report*, Sec. of Int., 1881, 13.

lowing its passage, no change in Congress to justify a hope that it would be repealed. It is true that the idea of forest conservation was spreading, but in Congress, especially in the Senate, the opposing forces gained considerable strength in the late eighties and 1890 by the admission of several new western states: North and South Dakota (1889), Montana (1889), Washington (1889), Idaho (1890), and Wyoming (1890). Most of these new states could usually be counted upon to vote against conservation measures.

During the eighties there was little agitation regarding this particular act, Congress being largely engrossed in a general overhauling of other public land laws, particularly the Preëmption, Timber Culture, Desert Land, and Commutation Homestead laws; yet a few bills relating specifically to free timber appeared, and all of them favored a *more liberal* policy. In 1880, Representative Downey of Wyoming introduced a bill to extend the Free Timber Act to all public lands regardless of their mineral character, but the bill was never reported.[19] Several years later, Representative Symes of Colorado attempted to amend the Free Timber Act, and Senator Teller (formerly Secretary of the Interior) made several similar efforts, one of his measures passing the Senate in 1888.[20]

Of a type entirely different from these bills was the conservation measure introduced by Representative Holman of Indiana in 1887.[21] This bill contained a provision that all timber lands should be classified as such, and the timber sold to the highest bidder at not less than appraised value, in tracts of not more than forty acres. This provision was intended to secure for the government something like the real value of the timber, but Smith of Arizona immediately offered an amendment providing free use of any timber not of commercial value, apparently fearing that the bill would curtail free timber privileges; and this amendment passed without opposition. It was fairly clear that free timber was not likely to be taken from the "poor settler" and miner until Congress experienced a change of heart.

While it was thus clear that Congress would not abridge the privileges given by the Free Timber Act, and even that it might extend these privileges somewhat, there was scarcely reason to expect such an extension of free timber privileges as came in the Permit Act of 1891. In 1890, in connection with the debates on the "annual" bill, "To repeal the Timber Culture and Preëmption laws," Senator Sanders of Montana offered an amendment providing free timber in Colorado, Montana, Idaho, North Dakota, South Dakota, Utah, and the gold and silver regions of Nevada, "for agricultural, mining, *manufacturing* or domestic purposes."[22] This amendment, it will be noted, not only provided for free timber in the entire public domain of the states and territories named, *without regard to its mineral character*, but it included *manufacturing* among the purposes for which timber might be taken, being thus a practical legalization of timber cutting for almost any purpose whatever, provided only that the timber was not taken out of the state. Senator Edmunds of Vermont declared that the amendment turned "all the timber on all the public lands of the United States in these States described, as open and common loot for every miner, for every railroad, for every sawmill, for everybody who thinks that he can make money out of cutting down the forests and selling their products."[23] Senator Reagan of Texas suggested that Sanders' amendment be changed, so that it should apply only to timber cut for *domestic* use and not for sale or speculation, but Sanders objected even to this limitation, and it was not pressed.

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[19] H. R. 6340; 46 Cong. 2 sess.

[20] H. R. 6709, S. 2510, S. 2877; 50 Cong. 1 sess.: S. 1394; 51 Cong. 1 sess. See also *Report*, Land Office, 1890, 82.

[21] H. R. 7901; 50 Cong. 1 sess.

There can be no doubt that Sanders, and most of the other western men, felt perfectly justified in asking for free timber for manufacturing purposes. As Sanders explained: "If I understand the Senator from Vermont [Edmunds], he objects to permitting the citizens living in those States, and to whom we thus deny the privilege of buying timber lands, the right to manufacture timber at all. I should think it would not be undesirable to permit manufacturing on the limited scale on which it is carried on in such States and Territories to be so carried on. That manufacturing consists principally in manufacturing lumber which is made into cradles to rock the children, shingles and roofs to cover the heads of the citizens, coffins in which to bury the dead, and lumber in the various forms which the necessities of civilized man have through considerable experience designated as wise and useful and comfortable and convenient. . . . There is not the remotest desire on the part of the citizens of the State which I represent, or of the neighboring States and Territories that topographically are like my own, to get timber land or timber for nothing; but the simple fact is that they cannot get it; they cannot buy it unless they go up to Oregon or to Minnesota, distant from 700 to 1100 or 1200 miles. Now it is wise, I say it is just, it is beneficent that these needs that exist there and that must be supplied shall be supplied and may be supplied and provided for by law, may be supplied without subjecting the persons to a criminal prosecution or to civil action." Senator Sanders was very bitter in his denunciation of the efforts of the government to suppress timber stealing, and he spoke of the government as "represented by a very small, and very narrow-minded and very malignant representative who grabs a citizen of the United States and says: 'We will wreak upon you some imagined and pent-up vengeance that we owe to this entire community for having cut this timber.' "

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[22] *S. Journal*, Sept. 16, 1890, 524: *Cong. Rec.*, Sept. 16, 1890, 10087 et seq. Some of the western men not unnaturally felt that since the timber was in their vicinity, it was theirs to use for any purpose whatever.

[23] It will be remembered that Edmunds had shown his interest in timber conservation fourteen years before, in the debates on the bill for the sale of southern lands.

One reason why the western men felt that they were entitled to free timber, even for manufacturing purposes, was that forest fires were destroying immense amounts of timber each year anyhow, and there was no apparent reason why this timber should not be used rather than allowed to go up in smoke. Sanders also claimed that the settlers in the West had earned the right to generous free timber privileges by their services in helping to put out fires; but it is doubtful whether most people in the West had performed any very important function in protecting the forests in this way.

Sanders' amendment encountered very little opposition in the Senate, except that of Senator Edmunds, and finally passed with only three opposing votes, those of Edmunds, Quay of Pennsylvania, and Spooner of Wisconsin. In the next session, the amendment was agreed to by the House, but President Harrison refused to sign it until provision was made for the regulation of timber cutting by the

Secretary of the Interior; and a separate bill, providing for such regulation was introduced.[24] Upon its passage, the original amendment became law on March 3, 1891.[25]

The history of the Free Timber Act has now been traced through the period from 1878 to 1891. It has been pointed out that it was poorly drawn, ambiguous, and most injurious in its effect on the public timber; that its faults were perceived even before it was passed, and afterward its evil effects repeatedly brought to the attention of Congress; that Congress, instead of eliminating some of the worst features of the law, left it upon the statute books untouched, and passed another free timber law even more vicious in its provisions. In order to understand more clearly the situation in regard to timber lands, however, it will now be necessary to return to the other law of 1878—the Timber and Stone Act.

THE TIMBER AND STONE ACT: PROVISIONS

The Timber and Stone Act,[26] applying to the coast states and Nevada, contained several important provisions besides the one permitting the sale of timber lands, and these will first be briefly noted. First of all, it provided (section 4) a lighter penalty for cutting timber on the public domain than had been imposed by the act of 1831,[27] and abolished the provision of the earlier act which had allowed informers or captors one half of all penalties or forfeitures collected. The penalty now imposed—$100 to $1000—was altogether inadequate, and did not include the costs of prosecution, which were often greater than the penalty to be collected.[28]

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[24] *Cong. Rec.*, Sept. 16, 1890, 10094: S. 5129; *Cong. Rec.*, Mar. 3, 1891, 3894.

[25] *Stat.* 26, 1095.

[26] *Stat.* 20, 89.

[27] *Stat.* 4, 472.

[28] *Report*, Sec. of Int., 1878, XV. Perhaps the influences behind the passage of this law are indicated by the manner in which the various penal provisions are arranged. Thus in section 4 there is a proviso that the "penalties herein provided shall not take effect until 90 days after the passage of this act." In the next section, part of the law of 1831 is repealed, and in the last section a general repeal clause sweeps away "all acts and parts of acts inconsistent with the provisions of this act." This last clause seems to have intended the repeal of the act of 1831, for that act (Revised Statutes, 2461) provided a penalty for trespassing entirely different from the penalty provided by the act of 1878, and so was apparently "inconsistent" with it. The evident intention was to repeal the act of 1831, and leave a period of

Free timber was granted in certain cases by the following proviso: "Nothing herein contained shall prevent any miner or agriculturist from clearing his land in the ordinary working of his mining claim or preparing his farm for tillage or *from taking the timber necessary to support his improvements.*" Interpreting the phrase relating to the clearing of the land, the United States Circuit Court held that the clearing must be incidental or subordinate to the cultivation,[29] but the agents of the Land Office, always lacking funds, and sometimes lacking honesty, were not likely to probe carefully into most cases to determine whether the clearing was incidental to the mining or cultivation, or whether it was the only object of the entry—a difficult question under some circumstances. This section was certain to result in fraud.

Section 5 of the act provided relief for trespassers, those who had not exported their booty from the United States being relieved from prosecution on payment of $2.50 per acre for the timber. This payment, it is true, did not give them title to the land, but the privilege of thus cutting timber worth often $5 or more, for a charge of sometimes less than one half its value seems generous enough, without the additional gift of a patent to the lands.[30]

Unnecessary to the accomplishment of the purposes of this act was a final proviso directing that all moneys collected should be covered into the treasury of the United States. Such a provision had already been enacted on April 30.[31]

Concerning the main provision of the act, the provision authorizing the sale of timber lands, several limitations must be noted. In

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90 days during which there should be no law for the punishment of trespassers in these states. It is true the Attorney-General decided that the general repeal clause did not repeal the act of 1831, but in making this decision he seemed to doubt whether he was following out the intentions which actuated Congress in passing the act. (S. Doc. 396, Pt. 3, 245; 59 Cong. 2 sess.: Compilation of Public Timber Laws, 1903, 105, 106.)

[29] U. S. vs. Williams; 18 Fed. Rep., 477.

[30] *Report,* Sec. of Int., 1878, XV. This attempt on the part of Congress to legalize timber stealing was in some degree thwarted by the Federal courts, which held that a party prosecuted was not discharged from liability by the payment of $2.50 per acre, but was still liable to the United States for the value of the timber cut. (U. S. vs. Scott; 39 Fed. Rep., 900. See also Cotton vs. U. S.; 11 Howard, 228: and U. S. vs. Cook; 19 Wallace, 591.)

[31] Cross Reference, p. 58.

the first place it related only to *surveyed* lands in the states named, and for that reason much of the land was not immediately available under its provisions; although Congress showed a disposition to extend its operation by appropriating $30,000 two weeks later, "for a survey of timbered lands exclusively."[32] In the second place, the government was to sell only lands "chiefly valuable for timber but *unfit for cultivation*," which had "*not been offered at public sale*." The restriction to lands unfit for cultivation, had it been enforced, would of course have eliminated some timber lands, while limiting sale to *unoffered* lands shut out practically all of the timber lands of the South, which had been offered under the act of 1876.[33] A third limitation forbade the sale of lands containing gold, silver, copper, or coal.

Subject to these limitations, the Timber and Stone Act provided for the sale of 160 acres of timber land to any person or association, "at the minimum price of $2.50 per acre." The phrase, "at the minimum price of $2.50 per acre," should doubtless have been interpreted to mean somewhere near the real value of the land, but not below $2.50. It was not so interpreted, however, and timber lands of all kinds were sold at this price. Secretary Schurz, in his circular of instructions issued soon after the passage of the act, made no specific reference to this section,[34] apparently deeming its intent clear enough without explanation, but the registers and receivers, lacking adequate provision for the examination and valuation of the lands, found it convenient to sell at the minimum rate provided; and this practice was always followed until as late as 1908,[35] when the timber lands were practically all disposed of. It seems to have been generally believed that the lands *must be* sold at $2.50, for so honest and aggressive a public servant as Commissioner Sparks complained in 1885 of the inadequacy of the price, apparently believing that the remedy lay with Congress, rather than with himself and the Secretary of the Interior.[36]

It is true that some of the regulations provided in the act seemed to indicate a desire to secure hones[illegible]stration. The applicant was required to file with the regist[illegible]rn statement" that the land was unfit for cultivation and valuable chiefly for its timber; that it contained no deposits of gold, silver, cinnabar, copper, or coal; that he had made no other applications under the act; that he did not desire to purchase the land on speculation, and that he had not made any agreement or contract for sale to anyone else. Furthermore, the testimony of two disinterested witnesses was required to support the allegations of the applicant. These witnesses were required to swear that they knew the facts to which they testified, from personal inspection of the land.[37]

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[32] *Stat.* 20, 229.

[33] Cross Reference, pp. 40-53.

[34] *Report,* Sec. of Int., 1878, 134.

[35] "Lumber Industry," I, 263.

[36] *Report,* Sec. of Int., 1885, 225.

The limitation of 160 acres of land to each purchaser was a characteristic sample of attempts by Congress to block the action of economic law, and its failure was assured from the beginning. One hundred and sixty acres, the "one family farm," is perhaps the most efficient unit in ordinary agriculture, but in the management of timber lands the most economical unit is a tract of thousands of acres, in some regions and under some circumstances, perhaps hundreds of thousands of acres. Such a tract permits the construction of efficient logging equipment, insures a timber supply for the life of an efficient mill, thus making possible the most economical lumbering operations. Also a single large tract of timber can be far more cheaply and effectively protected from fire than a number of smaller tracts—a very important consideration in view of the great expense involved in fire protection. Congress was following out a very unwise policy in disposing of timber lands under any circumstances, but doubly so in trying thus to dispose of them in 160-acre plots.[38]

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[37] *Report*, Sec. of Int., 1881, 39.

[38] It was not the western men alone who failed to see the folly of selling timber land in 160-acre plots. Almost everyone in Congress thought that 160 acres was the ideal unit. Thus in the debates on the bill to open up the southern lands in 1876, almost no one seemed to have any clear conception of the economic principles that were eventually to determine the character of the lumber business and the size of timber holdings. Edmunds and Boutwell recognized that the land should not be sold at all, but no one pointed out clearly that the 160-acre tract could never be the basis of an efficient lumbering business.

So in the debates on Holman's bill of 1888, almost everyone seemed to cling to the 160-acre plot for the sale of timber. Holman himself always favored small units in the lumber business and seemed to think that legislation could secure this condition. Like almost all the men in Congress, he failed to see that large tracts of

FRAUDS UNDE[illegible]TIMBER AND STONE ACT

Since the land must be "[illegible]r cultivation," no settler would buy it for the purpose of cultivation, and, since 160 acres was too small a plot for economical lumbering operations, larger tracts must somehow be obtained. Under the generally lax administration of the land laws this was easily accomplished. Large operators had their employees and other persons make the necessary affidavits, enter the lands, and then convey to their employers or principals. Irresponsible persons—loggers, mill hands, sailors, etc.—could be hired for from $50 to $150 or even less, and witnesses could usually be found to swear to the proof of the entry for $25 or less. A special agent reported finding records to prove that one such party had acted as witness in thirteen final proofs in seven days, although he had probably never seen any of the land. The agent reporting this estimated that three fourths of the entries under the act were fraudulent.[39]

The annual report of Commissioner Sparks in 1886[40] gives an interesting account of frauds perpetrated under this law among the redwood lands of the Humboldt district in California. A large timber firm in this district employed expert surveyors to locate and survey the lands, and then hired a number of agents to go upon the streets of Eureka and find persons to sign applications for land, and transfer their interests to the company, a consideration of $50 being paid for each application secured. No effort seems to have been made to keep the matter secret and all classes of people were approached and asked to sign applications. Sailors were caught while in port and hurried into a saloon or to a certain notary public's office. Farmers were stopped on their way to their homes, and merchants were called

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timber land were more valuable proportionately than small tracts, that 160 acres was more valuable as part of a large tract than it was by itself, and that, therefore, when such lands once found their way into private hands, they inevitably gravitated into large holdings. McRae of Arkansas was one of the first men in Congress to point out clearly that the lumber business demanded tracts larger than 160 acres. "Any man who knows anything about operating a saw-mill," he said in discussing the Holman bill, "at least in the southern country, must know that no man can afford to establish a saw-mill if he is limited to 160 acres of land. Such a restriction would simply invite evasion of the law."

[39] *Reports*, Land Office; 1883, 9; 1884, 8; 1886, 79-97: *Report*, Sec. of Int., 1885, 213.

[40] p. 94.

from their counters and persuaded to allow their names to be used. The lumber company's agents presented the applications to the register and receiver in blocks of as many as twenty-five at one time, paid the fees, had the proper notices published, hired men to make the proofs, paid for the lands, and received the duplicate receipts. The register and receiver seems to have been about the only person in the vicinity who was ignorant of these frauds.

This case indicated that the ramifications of fraud extended into the General Land Office at Washington, and illustrated some of the difficulties encountered by special agents when their discoveries implicated wealthy and influential persons. In 1883, a special agent reported that this company had procured a large number of fraudulent entries, amounting to not less than 100,000 acres. The agent disclosed the scheme in all of its details, indicating specific evidence to support his allegations, with the further information that he had been offered $5000 to suppress the facts and abandon the investigation. This agent was subsequently dismissed from the service because of influence brought against him at Washington by men from the Pacific coast. Although the report of this special agent was on file, containing, among other proofs, the affidavit of a former agent of the timber company in whose interest the entries had been made, disclosing the methods employed, and giving the names of thirty-six of the entrymen hired by the company, with the amounts paid them for their services—in spite of all this, the official in Washington having charge of these cases addressed a letter to the commissioner recommending the entries for approval; the commissioner, on receipt of this letter, issued patents in 157 cases that had been reported as fraudulent; and 22,000 acres of timber land passed into the hands of the timber company. Other agents sent out to this district were hampered by representatives of the timber company in every way possible. Some of the witnesses were spirited out of the country; others were threatened and intimidated; spies were employed to watch and follow one of the agents and report the names of all persons who conversed with him, and, on one occasion, two persons who were about to enter his room for the purpose of conferring with him, were knocked down and dragged away.[41]

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[41] For another interesting account of the difficulties encountered by govern-

Even had the representatives of the Land Office always been honest and possessed of sufficient funds to provide for careful inspection of cases, proof of fraud under the law would have been very difficult to sustain because of the stand taken by the Supreme Court of the United States. In the famous case of Budd vs. United States, evidence showed that a certain timberman had bought approximately 10,000 acres from various entrymen in a certain vicinity; that the deeds recited a consideration of $1 given for lands worth $5000; that in at least two instances land had been transferred to this timberman before final payment had been made to the government; that the same two witnesses had served in twenty-one of these entries; and that one of the witnesses had been engaged in examining the lands and reporting to the timberman; yet in the face of this evidence of bad faith the Supreme Court, Justices Brown and Harlan dissenting, held that since there was *no absolute proof of a prior agreement in regard to the particular tract in question,* the government suit for cancellation of patent must fail. The court even went so far as to add the dictum: "Montgomery [the timberman] might rightfully go or send into that vicinity and make known generally or to individuals a willingness to buy timber land at a price in excess of that which it would cost to obtain it from the Government, and any person knowing of that offer might rightfully go to the land office and make application and purchase a timber tract from the Government." Whatever may be said of the judicial logic of this decision, the result was to render the suppression of frauds under the Timber and Stone Act very difficult indeed.[42]

That the Timber and Stone Act would thus prove an instrument of fraud was foreseen, even before it passed Congress, and thereafter its evil effects were pointed out repeatedly. In 1878, Commissioner Williamson, in a letter to Secretary Schurz, made the following prediction: "Under the provisions of the bill the timber lands will, in my opinion, be speedily taken up, and pass into the hands of specu-

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ment inspectors see *Conservation,* Nov., 1908, 579-584. In one of the cases there described, an attempt was made to poison the government agent by putting rough-on-rats in his coffee at a special dinner to which he had been invited.

[42] 144 U. S., 154, 162. See also U. S. vs. Williamson; 207 U. S., 425: Olson vs. U. S.; 133 Fed. Rep., 849, 852, 853: "Lumber Industry," I, 266.

lators, notwithstanding the provisions to prevent such a result."[43] In 1883, Commissioner McFarland complained that the restrictions and limitations of the act were flagrantly violated, and in 1884 he said: "The result of the operation of the act is the transfer . . . of timber lands, practically in bulk, to a few large operators."[44] Sparks, in 1885, complained in a similar strain, that the act had operated "simply to promote the premature destruction of forests."[45] In each of his annual reports, he called attention to the vicious effects of the law, and asked for its repeal. The response of Congress to these complaints is characteristic of congressional legislation regarding the public lands.

EXTENSION OF THE PROVISIONS OF THE ACT

For a correct understanding of the action of Congress in regard to the Timber and Stone Act, it will be necessary to recall the fact that, at the time of its passage, sale of timber lands was the policy recommended by almost everyone. Disposal of timber lands by means of the Homestead and Preëmption laws had always resulted in frauds, and, as protection of the lands had never been seriously undertaken by the government, and the idea of national forests had been only vaguely suggested, sale seemed the only policy open to consideration. The act itself had of course been dictated mainly by the timber interests of the West, yet persons sincerely desirous of protecting the public timber had favored the policy of sale as the best means of protection, and the act had passed with scarcely an opposing voice. It is thus clear that before the act could be repealed, or its provisions seriously altered, there must be a complete reversal in the attitude of Congress.

Aside from the very limited agitation in favor of forest reserves, the creation of which would of course have involved the repeal or limitation of the Timber and Stone Act, little effort was made during the eighties to change that law in any way. Representatives Strait and Dunnell of Minnesota tried to amend the act to provide for sale only at appraised value, but without success.[46] Representatives Browne and Holman of Indiana and Payson of Illinois tried to secure the repeal of the act, but Browne's measure was never reported, one of Payson's was reported adversely by the Committee on Public Lands, and Holman's proposition, although debated at considerable length, did not pass even the House.[47] More courteous treatment was accorded a bill introduced by Senator Dolph of Oregon, to extend the act to all timber lands regardless of their fitness for agriculture. This bill was favorably reported by the Senate Committee on Public Lands, but fortunately made no further progress.[48]

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[43] *Report*, Sec. of Int., 1878, XV.
[44] *Report*, Land Office, 1883, 9; 1884, 8.
[45] *Report*, Sec. of Int., 1885, 225.

In the General Revision Act of 1891,[49] the Timber and Stone Act was not touched; and in the following year its provisions were extended to all public land states.[50]

EXTENSIVE TIMBER STEALING

The two acts of 1878 have now been traced through, and somewhat beyond, the period of the eighties. It has been pointed out how, in spite of repeated protests regarding the evil effects of these two laws, Congress, instead of repealing them, only extended their provisions. However, while the action of Congress seems, in the light of later developments, exceedingly unwise, yet any criticism of that action should be tempered by a careful consideration of the laws applying to timber during this period. A strict interpretation of the Free Timber Act, as already pointed out, would have limited its application to a very small fraction of the public timber lands; while the Timber and Stone Act applied to only four states, and, even in those states, provided for the sale of tracts too small for efficient lumbering. Thus, after the passage of these acts, just as before, there was no way by which timber for commercial uses could be honestly obtained from a considerable portion of the public lands. Congress, in trying to make timber available, cast aside the idea of selling the timber without the land, as making a great, unamerican land monopolist of the government; and, following the dictates of the lumber representatives, mining, and allied interests, extended the two laws of 1878. The results of this action will be treated later, but the point to be noted here is that from 1878 to 1891, just as before 1878, there was no general law for the purchase of timber on the public lands. Inevitably the timber which could not be secured honestly was secured by fraud.

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[46] H. R. 1164; 46 Cong. 1 sess.: H. R. 6997; 47 Cong. 2 sess.: H. R. 832; 48 Cong. 1 sess.

[47] H. R. 1909, *Cong. Rec.*, Jan. 7, 1884, 244: H. R. 7901; 50 Cong. 1 sess.: *Cong. Rec.*, Mar. 17, 1888, 2195: H. R. 379, *Cong. Rec.*, Dec. 21, 1885, 378: H. R. 1300, *Cong. Rec.*, Feb. 29, 1888, 1594.

[48] S. 2482, *Cong. Rec.*, Jan. 12, 1885, 622. Later in the same session the House voted favorably on Holman's proposal to suspend all the public land laws except the Homestead Law, pending legislation affecting lands, but in the Senate this proposal was not considered. (*Cong. Rec.*, Sept. 21, 1888, 8828.)

[49] *Stat.* 26, 1095.

[50] *Stat.* 27, 348. The act of 1889 (*Stat.* 25, 644), providing for the sale of Chippewa pine lands, cannot be regarded as an extension of the Timber and Stone Act, nor even of the general idea of sale, for in the case of the Indian lands the sale was at an appraised value, and other legislation of the same period regarding Indian lands indicates that the idea of sale was giving way to the idea of reservation. (*Stat.* 25, 673; 26, 146.)

It is important to bear in mind that no attempt is made here to measure the moral obliquity involved in these land frauds. From the point of view of a conservationist writing in 1919, it would be very easy to exaggerate the moral turpitude involved in stealing timber lands in the seventies and eighties. As just pointed out, there was no legal and honest way of acquiring timber lands in large enough tracts for efficient lumbering. Furthermore, speculation and frauds have always characterized the frontier, since the earliest years of the nation, and moral values have corresponded to the environment. The frontier has always attracted the adventurous element. In many regions of the West, even within very recent years, it has not been regarded essentially immoral to make a fraudulent entry with the intention of transferring to some timber company, even to commit perjury in making the entry. The practice has been too common to be viewed seriously.

Besides the frauds practiced under the two acts of 1878, there was a vast amount of stealing under other public land laws. The Preemption Law, the Commutation Homestead Law, and the Desert Land Law were still in force during this period, and were often used to obtain title to timber lands.

Millions of acres were taken up fraudulently under the Preemption Law. Gangs of men were often employed to make entries, a certain fee being paid for each fraudulent entry. In the redwood district of California, large tracts of immensely valuable timber lands were acquired under this act and under the Homestead Act, the sole improvements consisting of huts or kennels totally unfit for human habitation.[51] The head of a large lumber company at Duluth, Minnesota, once stated that he, with his associates, had acquired thousands of acres of pine lands under the Preëmption Act by simply filing the names of persons found in the St. Paul and Chicago directories. This man had a standing agreement with the local land officers whereby they were to permit such entries for a consideration of $25 each.[52]

The Commutation Homestead clause was quite as effective an instrument of fraud as the Preëmption Law. During the course of some fifty years, a total of over 35,000,000 acres of land was acquired by commutation, the government receiving something over $50,000,000 for lands worth several times that much, and the profit going largely to perjured entrymen and their employees. A prominent official in the United States Forest Service once said of the operation of the act: "It has been my experience and observation in ten years of field service that the commutation homestead is almost universally an entry initiated with a full intent never to make the land a home. Actual inspection of hundreds of commuted homesteads shows that not one in a hundred is ever occupied as a home after commutation. They become part of some large timber holding or parcel of a cattle or sheep ranch." In the vicinity of Duluth, Minnesota, it was at one time a common practice for persons desiring to commute to take an ordinary dry-goods box, make it resemble a small house with doors, windows, and a shingle roof. This box would be 14 x 16 inches, or larger, and would be taken by the entryman to his claim. On date of commutation proof, he would appear at the local office, swear that he had upon his claim "a good board house, 14 x 16, with a shingled roof, doors, windows," etc. The proof on its face would appear excellent, and was readily passed by the local officers. Thus, in a variety of ways, the commutation clause was used in the fraudulent acquisition of lands, often valuable timber lands. Senator Patterson of Colorado declared in the S[illegible]te[illegible] 1904 that "in Colorado and Wyoming, eight acres of land o[illegible] of [illegible] to which title has been given in the last twenty years have been obtained fraudulently and not for agricultural purposes at all."[53]

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[51] Donaldson, "Public Domain," 543.

[52] "Lumber Industry," I, 260, 261: Donaldson, "Public Domain," 682, 1220.

While there were a great many timbermen who used the various public land laws to gain title to lands, there were always other timber operators who, with no pretense at land settlement or purchase, erected mills on the public lands and sawed the timber. These men did not confine their efforts to any particular section of the country, but were generally most active where timber stealing was most profitable. In the early eighties, Wisconsin and Michigan were still the field of extensive operations, the public lands in these states furnishing much of the building material for the growing prairie states of the Central West. Somewhat later, the neighborhood of the Rainy River, along the Canadian boundary line, was the scene of much activity. Men from Canada built great roads into the forests on the American side, and took the timber out on the river where steamers were engaged in carrying it away. In 1890, the government sent an expedition to this district, fitted for a winter campaign against the trespassers.[54]

Representative Wells of Wisconsin once gave a very interesting, though perhaps exaggerated, account of the early conditions in the Lake states, describing how "men in the early days of Wisconsin and Michigan, so long as the timber lasted, would purchase 40 acres and 'capture'—they did not call it 'stealing'—timber on 320 or 640 acres." "It is a known fact," he said, "that in Wisconsin and Michigan the lumbermen, the pine-land thieves, have grown rich and purchased seats in this house—yea, and wandered over into the other, and dangerously near some of them have wandered to the Interior Department, and some of them, it is said, wandered even in there."[55]

Some of the western states presented newer fields. In Washington, in and around Puget Sound, famous for its magnificent forests, timbermen, mostly residents of San Francisco, erected large sawmills upon the public lands, and for years engaged in the manufacture

[53] *Report*, National Conservation Commission, III, 391: "Lumber Industry," I, 259-263: Donaldson, "Public Domain," 540, 683, 1220: *Conservation*, Nov., 1908, 579-584: *Cong. Rec.*, Mar. 31, 1904, 4032: S. Doc. 189; 58 Cong. 3 sess., 106.

[54] *Report*, Land Office, 1881, 370-377: *Report*, Sec. of Int., 1890, XVI.

[55] *Cong. Rec.*, Dec. 7, 1894, 111.

and export of lumber. Large quantities of timber in N[illegible] Me[illegible]o were cut from the public lands for delivery under contra[illegible] to [illegible]lroads which were built in Mexico, notably to the Mexican [illegible]entral, which openly advertised in New Mexico for railroad ties to be delivered to its agent in Mexico; and the Santa Fé Railroad transported much of this material out of the territory, contrary to law. In 1885, the United States instituted suit to recover the value of 60,000,000 feet of lumber cut by the Sierra Lumber Company in California.[56] In 1887, a United States district attorney reported that in Nevada hundreds of men were systematically engaged in cutting timber from the public lands. He estimated that in the region about Eureka, Nevada, several hundred square miles of land had been thus swept bare.[57] In Montana, a trespasser was found to have 9400 cords of wood piled up on the public lands along the Northern Pacific Railroad tracks, waiting shipment.[58]

The Gulf states—Florida, Alabama, Mississippi, and Louisiana—with their vast forests of oak and pine, their convenient and accessible harbors for shipment, their numerous streams, lakes, and lagoons offering cheap transportation to market or mill, were for years infested with a class of non-resident plunderers, who shipped to various parts of the world immense quantities of the finest ship timber, invading even the United States naval reserves with their sawmills.[59] One Italian firm working in western Florida was charged with receiving 4,512,000 feet of lumber taken from the public lands, and another Italian firm was reported to have taken even more. Agents in Alabama reported more than 17,000,000 feet of timber taken from public lands in that state, transported to Pensacola, and there sold in the market or shipped to foreign ports. Whole fleets of vessels entered the harbors of Pensacola, Sabine Pass, Atchafalaya, and other places along the shore, and carried away cargoes composed mainly of timber taken from the public lands.[60]

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[56] *Report*, Sec. of Int., 1885, 234.

[57] S. Ex. Doc. 259; 50 Cong. 1 sess.

[58] No. Pac. R. R. Co. vs. Lewis; 162 U. S., 366.

[59] *Report*, Land Office, 1881, 376.

[60] *Ibid.*, 1888, 54; 1880, 33. It was not Federal lands alone that were invaded by timber thieves, for state lands suffered quite as much. Thus even as late as 1907, Governor Hughes of New York was fighting timber thieves who had stolen large

In addition to the mill owner, timber contractor, a[illegible] there was a class of depredators whose operations in the S[illegible] perhaps even more destructive—the turpentine distillers. To [illegible] the crude material to supply their works, these operators boxed the trees on thousands of acres, killing them in a few years.[61]

It was difficult to get any sentiment for law enforcement in the timber regions of the country. Senator Wilson of Washington once described in the Senate the difficulties that always stood in the way of protecting the western timber from trespass. "I recollect very well a few years ago," he said, "a special agent of the General Land Office came to our town who said he was going over to investigate some timber land depredations on Badger Mountain. I said to him, 'When you get over there, you will find a very beautiful valley of 300,000 acres of land, and you can see that every farmhouse and all the buildings there are built of timber taken from Badger Mountain.' I said, 'You go to the town of Waterville, with a thousand people, and you will find the courthouse and all the buildings there are built from timber taken from Badger Mountain; and if you think you can get a verdict, you had better try it.' He did try it, but he did not succeed."[62]

TRESPASS BY RAILROADS

Among the most extensive depredations on the public timber were those by the railroads, in some cases under cover of their right to take materials for construction; in some cases relying on unsurveyed land grants; sometimes through a fraudulent use of the indemnity laws of 1870 and 1874; and often with no pretense of legality.

Under a very liberal interpretation of the Right-of-Way Act, some of the railroads took vast amounts of timber for construction purposes. Secretary of the Interior Teller ruled that the phrase, "adjacent to the line of road," applied to timber growing anywhere within *fifty miles* of the track, and even beyond the terminus of the road. The railroads assumed further that the phrase "construction pur-

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amounts of timber in the Adirondack Mountains. (*Forestry and Irrigation*, June, 1907, 282: *Outlook*, Mar. 30, 1912, 729.)

[61] *Report*, Land Office, 1881, 376; *Proceedings*, Am. Forestry Assoc., 1894-95-96, 6.

[62] *Cong. Rec.*, May 6, 1897, 910.

[illegible] not only to the roadbed proper but to station houses, [illegible]nowsheds, etc.[63] Some railroads went beyond all possible [illegible] of legality in their depredations. Thus the Union River Logging Railroad Company in Washington was organized for the ostensible purpose of engaging in ordinary railroad business, and application was filed for benefits under the act of 1875, which the department approved. The company built five miles of track into the thickest timber, using government timber in construction, and engaged for years in the logging business, with no pretense of carrying passengers, or any freight but their own logs stolen from the government lands.[64]

Of timber trespass under cover of unsurveyed land grants, the Northern Pacific furnished the most flagrant cases. The work was sometimes done by a subsidiary company, owned by the railroad and operating by special concessions. In 1883, the Montana Improvement Company, a corporation with capital stock of $2,000,000, mostly owned by the Northern Pacific Railroad Company, was formed for the purpose of monopolizing timber traffic in Montana and Idaho. Under a twenty-year contract with the railroad this company exploited the timber on unsurveyed lands for great distances along the line of the road.[65] The government was always slow to survey the railroad grants, and, until they were surveyed, there was no way of distinguishing the alternate sections belonging to the railroad from those reserved by the government.

Just what were the rights of the railroad in these unsurveyed lands was not made very clear by the decisions on the subject. The Supreme Court of Montana seemed inclined to give the railroad unrestricted rights in these lands. In a famous case in that court, the United States brought suit for an accounting to recover $1,100,000 for timber and lumber alleged to have been converted by the railroad, and for a perpetual injunction restraining the railroad company from taking more timber. The court, in a somewhat argumentative decision, held that, although the United States and the railroad company had such a common interest in the property as to enable either to protect it against a stranger, yet the United States had no beneficial interest

[63] "Land Decisions," I, 610; *Report*, Land Office, 1889, 58, 59.

[64] *Opinions*, Attorney-General, 19, 547.

[65] *Report*, Sec. of Int., 1885, 234. See also *Opinions*, Attorney-General, 20, 542.

in the odd sections, and therefore a suit for accounting would not lie. An injunction was denied on the grounds that the value of the lands consisted in the utilization of them, and that it was not waste for one co-tenant to cut and utilize the timber, "for if the plaintiff could enjoin the defendant the defendant could enjoin the plaintiff, and the common property would be rendered useless."[66]

This decision seemed to deprive the government of all remedy in such cases of trespass upon unsurveyed lands, and it was often cited as controlling on the point. The United States Supreme Court had long before held, however, that while the railroad grants were grants *in praesenti*, and vested the title in the grantee, yet a survey of the lands and a location of the road were necessary to give precision to the title and attach it to any particular tract,[67] and this doctrine was again enunciated by the same court in 1891.[68] Furthermore, as early as 1876, a law had required that before any lands should be conveyed to a railroad company, the company must first pay into the United States treasury the cost of "surveying, selecting and conveying the same."[69] The Northern Pacific made some surveys of its own and designated certain lots as odd numbered, and even encouraged the cutting of timber on these lots, but of course these private surveys did not entitle the company to any of the land. It is doubtful whether the surveys were honestly made anyhow.[70]

An analysis of the above decisions and law indicates that while the railroad had no right to cut timber from the unsurveyed lands, the government was helpless to prevent such illegal cutting; and this was the position taken by the Land Office.[71] Mineral lands were of course excepted from the land grants, and therefore in no case open to exploitation by the railroad, but this exception was of no consequence, since, the lands being unsurveyed, there was no way of telling what particular lands were mineral.

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[66] U. S. vs. Pac. R. R. Co.; 6 Mont., 351, 355, 357. Whether, as has sometimes been suggested, there was Northern Pacific influence behind this decision or not, it is a very delicate and difficult question. Certainly the general tone of the decision was altogether lacking in judicial poise, and, as above pointed out, somewhat out of harmony with previous decisions of the United States Supreme Court. The Northern Pacific, like some of the other land grant railroads, had great influence in some of the western states, and this power was often wielded most unscrupulously.

[67] Leavenworth R. R. Co. vs. U. S.; 92 U. S., 741.

[68] Deseret Salt Co. vs. Tarpley; 142 U. S., 249.

[69] *Stat.* 19, 121.

[70] 92 U. S., 741.

[71] *Report*, Land Office, 1892, 50.

The Indemnity Act of 1874 was used by the railroad companies as a means of exchanging their worthless lands for valuable timber lands, one method of procedure being to hire men to file claims on the worthless tracts and then choose valuable indemnity lands elsewhere.[72] At one time, this seems to have been unnecessary, for, prior to Secretary Schurz's administration, it was the practice of the Land Office to allow selections of indemnity lands without any specification of losses, but Schurz issued instructions requiring losses to be specified. Perhaps an illustration of the influence which the Northern Pacific had in the Land Office at Washington may be seen in the circular issued by the commissioner in 1883, allowing that railroad to make selections without designating any specific loss.[73]

EFFORTS TO PROTECT THE PUBLIC TIMBER

During the administration of Secretary Schurz this wholesale timber stealing was in some slight measure checked.[74] Secretary Teller, however, seems to have been little interested in timber preservation. He never mentioned the subject in any of his annual reports, and his later record as a staunch anti-conservationist gives good ground for the belief that he probably did as little as possible to discourage timber stealing.[75] Commissioner Sparks, of the succeeding administration, speaking of Teller's policy, said: "The widespread belief of the people of this country that the Land Department has been very largely conducted to the advantage of speculation and monopoly, . . . rather than to the public interest, I have found supported by developments in every branch of the service. It seems that the prevailing idea running through this office and those subordinate to it, was that the Government had no distinctive rights to be considered and no special interests to protect."[76] Two years later Sparks announced that he had "no word to recall that has hitherto been uttered touching the aggravated misappropriations to which the public lands have been subjected."[77] Secretary Teller, as has been previously noted, seemed unduly favorable to the railroads. Not only did he interpret the Right-of-Way Act with an unmistakable bias in favor of the railroads, but it has been officially stated that in the case of certain unearned grants, he worked the clerical force of the Land Office over time during the last days of his administration to complete the issue of patents before the new administration should enter.[78]

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[72] *Report*, Sec. of Int., 1885, 41; 1886, 29 et seq. The Great Northern Railway Company, through its subsidiary, the St. Paul, Minneapolis & Manitoba, now holds a timber reserve of about 50,000 acres of heavily timbered land in Washington, which it obtained as indemnity for lands not secured under its Minnesota grant. There is no particular imputation of fraud in regard to these lands, however. ("Lumber Industry," I, 242.)

[73] *Report*, Sec. of Int., 1893, XIV, XV.

[74] *Report*, Land Office, 1877, 20.

[75] See, however, S. 914; 54 Cong. 1 sess.

The administration of President Cleveland marks out a separate period in the history of the public lands. President Hayes had called for timber preservation as early as 1878,[79] but Cleveland was the first president to take an active interest in the public lands, and an uncompromising stand for enforcement of the laws. His Secretary of the Interior, L. Q. C. Lamar, was likewise favorable to law enforcement; but the great moving force in the department was Commissioner of the Land Office William Sparks.

Eight days after Sparks entered office, he issued an order suspending final action upon all entries on the public lands, with a few exceptions, in Dakota, Idaho, Utah, Washington, New Mexico, Montana, Wyoming, Nevada, and parts of Kansas and Nebraska, and suspending all entries under the Timber and Stone Act without exception.[80] This was the beginning of his campaign against land and timber thieves, and he followed it up consistently. Perhaps he was rather too vigorous or too undiplomatic, or it may be that he was merely fighting a hopeless fight; at any rate he incurred the unqualified hatred of most of the congressmen from the public land states, who never missed an opportunity to attack him in Congress, and in 1888 he was removed from office because, it was said, of a disagreement with the secretary on the question of land-grant forfeiture. Even in recent years, western men have referred to the way settlers were "hounded" by the Department of the Interior during Cleveland's administration.[81]

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[76] *Report*, Sec. of Int., 1885, 155.

[77] *Report*, Land Office, 1887, I.

[78] *Report*, Sec. of Int., 1885, 43, 187-197.

It is true that during Teller's administration a special division of the Land Office was created to promote the prompt and effective disposition of cases involving fraud, but whether this was the work of Teller or of his commissioner, McFarland, does not appear. Commissioner McFarland evinced considerable interest in the matter of forest preservation. (*Report*, Land Office, 1882, 11; 1883, 9.)

[79] *Cong. Rec.*, Dec. 2, 1878, 6.

[80] *Report*, Land Office, 1885, 50: *Report*, Sec. of Int., 1889, XIX.

Secretary Vilas (1888) followed out a policy similar to that of Lamar and Sparks, but his successor, John W. Noble (1889-1893), secretary under President Harrison, adopted a radically different policy with regard to the timber lands. He found 105,000 cases piled up in the Land Office awaiting final action, and proceeded to dispose of them by "a more liberal interpretation of the land laws in favor of the settlers."[82] Although Secretary Noble seemed to judge his own efficiency by the amount of land he was able to dispose of,[83] and although his policy doubtless resulted in many fraudulent claims of all kinds passing to patent,[84] yet he was sincerely interested in the public timber lands and later accomplished much for their preservation in connection with the law of 1891. This will be considered in connection with forest reserves.[85]

THE "BILL TO LICENSE TIMBER THIEVES"

While most of the officials in the Land Department thus called insistently for better law enforcement, a great many members of Congress always thought the enforcement was entirely too vigorous. The complaints of two of these timber congressmen in the early fifties have already been mentioned;[86] and in Schurz's administration such complaints became more numerous, until a law was actually secured releasing some of the timber thieves from their difficulties. On May

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[81] *Cong. Rec.*, Sept. 24, 1888, 8876.

[82] *Report*, Sec. of Int., 1889, XIX.

[83] *Ibid.*, 1890, III.

[84] In 1889, Secretary Noble reported a decreasing number of fraudulent entries, but this may only have indicated laxity of administration. (*Report*, Land Office, 1889, 54.)

[85] Cross Reference, pp. 115, 116.

[86] Cross Reference, p. 41.

[illegible]1879, Represe[illegible]erbert of Alabama introduced a bill to [illegible]eve trespassers [illegible] prosecution for timber stealing done previous to that date, on payment of $1.25 per acre for the land.[87] This bill to "license thieves on the public domain," as one of the opponents called it, received the unanimous approval of the Committee on Public Lands, composed of Representatives Converse of Ohio, Wright of Pennsylvania, Steele of North Carolina, McKenzie of Kentucky, Williams of Alabama, Hull of Florida, Ketchem of New York, Ryan of Kansas, Sapp of Iowa, Washburn of Minnesota, and Bennett of North Dakota. Dunnell of Minnesota at first opposed with characteristic vigor, but later, after the bill had been somewhat amended, changed his attitude. Conger of Michigan called it a bill "to make easy trespass on the public domain," and Hazelton of Wisconsin read a report from the Commissioner of the Land Office showing the vast amount of timber stealing which would thus be condoned, showing that trespasses had been reported during the two years previous, amounting to 225,000,000 feet of lumber and 2,500,000 railroad ties, besides a vast amount of other wood.[88] Poehler of Minnesota offered an amendment requiring trespassers to pay double the government price of the lands, but it failed by a vote of 50 to 32.

In the debates on this bill it was frankly admitted that no efforts had been made to stop timber stealing before the time of Schurz, and Herbert argued that "to commence suddenly a system of prosecutions, to enforce them vigorously, exacting the extreme penalty of the law, is cruel and harsh."[89]

There was much talk about the "spies and informers of the government," "infesting all parts of the timber-growing regions," "paralyzing the great lumber industries" of certain sections by seizing stolen lumber, and making themselves generally obnoxious to the "poor laborers" who had been working on the public lands.[90]

A certain element of justice there was, it is true, in this bill. Dunnell explained his change to a favorable attitude by saying that he had learned of timber cut as early as 1868, found in the hands of purchasers and seized by the United States officers[illegible]eems probable [illegible] most buyers knew where their timber came [illegible], and the deb[illegible] indicate that innocent purchasers were the objects of little more solicitude than the timber trespassers themselves.

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[87] H. R. 1846; 46 Cong. 1 sess.
[88] *Cong. Rec.*, June 9, 1879, 1877.
[89] *Ibid.*, Mar. 15, 1880, 1564.
[90] *Ibid.*, May 20, 1880, 3580.

Robinson of Massachusetts offered an amendment limiting the condoning effects of the bill to cases of trespass "in the ordinary clearing of the land, in working a mining claim, or for agricultural or domestic purposes," and this amendment, extended by Conger to cover also cases of unintentional trespass, passed by the rather close vote of 94 to 85.[91] The vote on this amendment, which Converse said meant the practical defeat of the bill, indicates a fairly clear division in the House on the question of conservation. New England did not cast a single vote against the amendment. Pennsylvania, a conservation state from early times, gave a heavy vote for the amendment, as did also Illinois, Wisconsin, and Michigan; while the South voted almost unanimously against it.[92]

The bill, as amended, passed the House, but in the Senate various other amendments were attached, and a conference committee was necessary to adjust the views of the two houses.[93] As finally passed,[94] the act released trespassers from prosecution in any civil suit, for trespass committed prior to March 1, 1879, on payment of the regular price of the lands (usually $1.25 per acre). Thus it had been considerably improved since its first presentation, the immunity being limited to civil suits, and applying only to trespasses committed prior to March 1, 1879. Even as amended, it was clearly favorable to the trespassers, and the final vote was cast with full appreciation of that fact.[95]

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DIFFICULTIES IN THE WAY OF TIMBER PROTECTION

The Land Office was always handicapped in its efforts to protect the public timber, not only by the evil character of the existing law, but by the absence of certain other laws under which to proceed. For instance, altho[illegible]st fires were unquestionably the cause of far more timber d[illegible]n than all other depredations combined,[96] yet there was no [illegible]w against setting fires on the public domain. Fires were st[illegible] hunters, prospectors, tourists, grazers, and others, and the [illegible]emedy available to the government agents was to prosecute the [illegible]ders in the local courts under state laws. This remedy was prac[illegible]lly valueless, because of the difficulty of apprehending offenders, the lack of effective state laws, and, in many regions, the impossibility of securing any sentiment favorable to law enforcement.[97]

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[91] *Cong. Rec.*, May 21, 1880, 3627, 3631.

[92] This, it must be noted, happened nearly a decade earlier than the abolition of private sale in the South (Cross Reference, pp. 40-53), in which the southern members of the other House of Congress showed a radically different attitude.

[93] *Cong. Rec.*, June 10, 1880, 4384; June 12, 4483.

[94] *Stat.* 21, 237.

As early as 1880, Secretary Carl Schurz called the attention of Congress to the need for legislation, but, although several bills were

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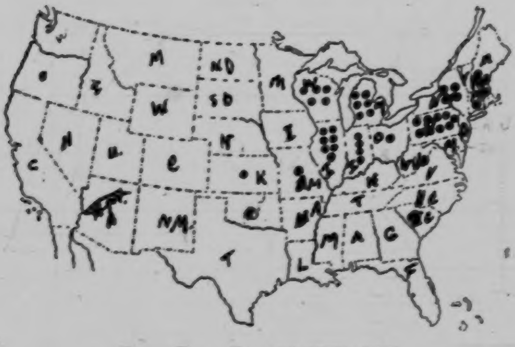
[95] Perhaps the final vote on this bill indicates more clearly than any other vote yet cast where conservation had its strongest support.

VOTES IN THE HOUSE AGAINST THE BILL OF 1880



Cong. Rec., June 14, 1880, 4538

[96] In 1887, the Secretary of the Interior estimated the annual loss from fire alone at over $7,000,000. In 1909, the National Conservation Commission estimated the loss from forest fires since 1870 at $50,000,000 annually. (*Report*, Sec. of Int., 1887, 22: S. Doc. 676; 60 Cong. 2 sess., Vol. I, 20.)

[97] Fountain, "The Eleven Eaglets," 75: *Proceedings*, Am. Forestry Assoc., 1891-92-93, 123-126; 1894-95-96, 149, 150: *Proceedings*, Am. Forestry Congress, 1885, 59, 60: *Forestry and Irrigation*, Feb., 1906, 93. For state laws regarding forest fires, see Hough, "Report on Forestry," II, 30 et seq.

introduced,[98] nothing was accomplished. In 189[illegible]dent Harrison sent a message to Congress asking for legisla[illegible], and Senator Paddock of Nebraska tried to secure this. Pa[illegible]ill passed the Senate in spite of the opposition of Senator T[illegible] argued that the United States had no right to regulate the [illegible]ands within the states, but it was never reported in the House.[illegible]

In their efforts to enforce the laws against [illegible]er depredations, government officers were hampered by the fact that the registers and receivers had no power to subpoena witnesses. Citizens did not care to testify, and often hardly dared to, especially in the most notorious cases of fraud, where wealthy individuals or corporations were concerned.[100] Timber operators usually had little difficulty in presenting their witnesses, in numbers proportionate to their resources, but the government lacked the power to secure needed testimony.

Commissioner Sparks, in 1886, called for a law conferring this power,[101] and later commissioners of the Land Office repeated his recommendation, but in vain. In 1887, Senator Plumb of Kansas introduced a bill to confer this power, but it was lost in committee, and the following year a similar bill was reported adversely by the Committee of the Judiciary, on the ground that the "expediency and constitutionality" of the proposed legislation were questioned.[102]

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GROWTH OF CONSERVATION SENTIMENT

It has now been pointed out that the public timber lands were being stolen and plundered on a vast scale, and that most of the officers of the Land Office between 1878 and 1891 constantly called for better protection. Before treating further of congressional action in response to this, it will be necessary to see what was the status of public opinion in the matter, since Congress is usually more responsive to public opinion than to departmental recommendations.

While there were, during the seventies, some signs of public interest in timber preservation, the development of any general interest in the matter belonging rather to the decade of the eighties and later. In 1880, Secretary Schurz spoke of the "wholesome sentiment growing up," and of the many letters that were coming to his office asking for better timber protection. "There is scarcely a responsible journal in the United States," he said, "that has not during the last two years. . . . published articles on the injury inflicted upon the country by rapid and indiscriminate destruction of its forests." Without doubt, Schurz exaggerated here, yet the next year Commissioner McFarland said: "The special agents report that in many localities which have hitherto been hostile to them, . . . there at present seems to be a general feeling in favor of the suppression of further depredations."[103]

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[98] H. R. 5556; 49 Cong. 1 sess.: H. R. 3279; 50 Cong. 1 sess.: H. R. 2647; 52 Cong. 1 sess.

[99] S. 4156; *Cong. Rec.*, June 26, 1890, 6533.

[100] *Report*, Land Office, 1886, 101.

[101] *Ibid.*

[102] S. 3101; *Cong. Rec.*, Jan. 10, 1887, 478: H. R. 848; 50 Cong. 1 sess.

About this time several magazines began to publish articles relating to forests and forest preservation. The *Canadian Monthly Magazine* had shown an interest in the preservation of Canadian forests as early as 1871, and that journal continued to bring out occasional articles in subsequent years.[104] As previously stated, F. L. Oswald wrote in the *Popular Science Monthly* in 1877 concerning the sanitary influence of trees;[105] and two years later he wrote on the same subject for the *North American Review*.[106] In the latter year, *The Nation* printed an able discussion regarding the need of a system of forestry.[107] Other magazines followed, and the newspapers did something to help rouse public opinion.

In the eighties, there was considerable newspaper writing regarding forests and the tariff on lumber. In 1856, the treaty of reciprocity with Canada had provided for the admission o[illegible] lumber into the United States for a period of ten years.[108] In 18[illegible] the agreement had been terminated, and a tariff on lumber had immediately gone into effect. During the early eighties, a considerable agitation arose for the repeal of this "bounty on forest destruction." Perhaps the higher price of lumber and of lumber products, particularly paper, had as much to do with this agitation as any desire to conserve the forests, but conservation arguments were freely used and no doubt were given a publicity of value in arousing public opinion, for they appeared in some of the most influential journals in the country—the *New York Times, Sun, Evening Post, Daily Commercial Bulletin,* the *Boston Herald,* the *Chicago Tribune,* and the *Kansas City Times.*[109]

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[103] *Report*, Land Office, 1880, 171; 1881, 376.

[104] Aug., 1879, 136.

[105] Aug., 1877, 385.

[106] "The inhabitants of Persia, Egypt and Mesopotamia, and the Mediterranean nations, who once enjoyed heaven on this side of the grave, have thus perished together with their forests," wrote Mr. Oswald, "leaving us a warning in the ruins of their former glory, which nothing but a plea of religious insanity can excuse us for having left unheeded for the last eighteen hundred years. The physical laws of God can not be outraged with impunity, and it is time to recognize the fact that there are some sins against which one of the Scriptural codes of the East contains a word of warning. The destruction of forests is such a sin, and its significance is preached by every desolate country on the surface of this planet. Three million square miles of the best lands which ever united the conditions of human happiness have perished in the sand drifts of artificial deserts, and are now more irretrievably lost to mankind than the island ingulfed by the waves of the Zuyder Zee." (*No. Am. Review*, Jan., 1879, 135.)

[107] Jan. 30, 1879, 87.

Besides this journalistic writing, a number of books on forestry appeared. In 1878, Verplanck Colvin brought out his book on "Forests and Forestry," dealing largely with the influence of forests on climate. In the same year, B. G. Northup published his work on "Economic Tree Planting," and the following year, S. V. Dorrien finished his treatise on "Forests and Forestry." The following year, Hough completed the second volume of his "Report," and in 1882, the third volume.[110] In the latter year, he also published his "Elements of Forestry," dealing with practical forestry and horticulture. In 1880, B. G. Northup, secretary of the Connecticut Board of Education, published his report on "Forestry in Europe," a book of generalities. H. W. S. Cleveland's work on "The Culture and Management of Our Native Forests," published in 1882, appealed for more conservative use of American timber resources. R. W. Phipps' "Report on the Necessity of Preserving and Replanting Forests" was published in Toronto in 1883. Somewhat later a number of scientific papers appeared. In 1885, Dr. J. M. Anders read before the Philadelphia Social Science Association a paper on the "Sanitary Influences of Forest Growth," describing the manner in which germs of malaria were supposed to be oxidized by the "ozone" produced by plants and trees. In 1886, B. E. Fernow became chief of the Forestry Division at

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[108] Hough, "Report on Forestry," II, 513.

[109] A collection of clippings relating to this matter was found in a compilation, "The Spirit of the Press," in the Boston Public Library. See also *Commercial Gazette*, Cincinnati, Jan. 5, 1883.

[110] Dr. Fernow thinks Hough's "Report" made little impression at first.

Washington, while, in the same year, E. A. Bowers entere[illegible] government service as inspector in the Land Office; and in the following years these two men issued a number of reports and articles of importance, these appearing not only in government publications and in magazines, but in scientific journals. Both men read papers relating to forest preservation at the meeting of the American Economic Association in December, 1890.[111]

Much of the valuable literature on forestry was written for special forestry journals, of which several appeared during the eighties. In 1886, the Pennsylvania Forestry Association began the publication of a bi-monthly journal, *Forest Leaves*, which has persisted to this day; and in 1888, Professor C. S. Sargent of Harvard University published the first number of *Garden and Forest*, which for ten years did much to enlighten the public on forestry matters. Previous to this, however, the first *Journal of Forestry* had appeared, edited by F. B. Hough. This journal survived just one year, vanishing for lack of readers,[112] but it was followed by irregularly appearing forest bulletins, several of them written by Dr. Fernow.

FORESTRY ASSOCIATIONS

Several forestry associations were formed during this period. The American Forestry Association had been organized in 1876, but had not prospered. In 1881, however, on the occasion of the centennial celebration of the surrender of Yorktown, several descendants of Baron von Steuben came to America, and to the influence of one of these, an official in the Prussian Forest Department, can be traced the meeting of the American Forestry Congress at Cincinnati the next spring.[113] This Forestry Congress lasted five days, among the spectacular features of the occasion being a parade of 60,000 school children to the tree-planting exercises.

Other associations were formed from time to time, more or less under the lead of the national association. The same year that the

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[111] Am. Ec. Assoc. Publications, 6, 154, 158.

[112] Fernow, "History of Forestry," 432.

[113] Dr. Fernow, in a speech delivered at Lehigh University in 1911, gives an interesting sidelight on the influence of politics in the conservation movement. He says that the Forestry Congress at Cincinnati was part of a political movement to boom the candidacy of a man who was seeking the office of mayor at that time.

American Forestry Association was formed, a similar organization was perfected at Montreal, although it never attracted a very large membership, and never exerted great influence.[114] The next year, the Ohio Forestry Association was organized[115]—an outgrowth of the Cincinnati Forestry Club. In 1886, the Pennsylvania Forestry Association was formed,[116] always thereafter one of the most active of these associations. Somewhat similar to these was the Kansas Horticultural Society, which, at the time of the formation of the Pennsylvania association, was publishing its seventh annual report. A forestry convention was called in Maine in 1888 to discuss timber protection.[117]

In the South, the development of conservation sentiment was very slow, yet some interest was shown during this period. In the late eighties, a forestry association was formed in Texas; two state forestry congresses met in Florida; and the Southern Forestry Congress, an interstate association, was formed, and later affiliated with the American Forestry Congress.[118]

STATE ACTION

As a result, in some measure at least, of this associated effort,[119] many of the states appointed forestry commissions or commissioners. Most of these were instituted to work out appropriate forest policies for the states, but some became permanent parts of the state organization with executive or merely educational functions.[120] In 1880, and later in 1885 and 1889, temporary commissions were created in New Hampshire, and in 1882, one in Vermont; but of much greater importance was the New York commission of 1884. The legislature of New York appropriated $5000 in 1884 for the employment of experts to work out a system of forestry for the state. This commission, composed of Chas. S. Sargent, D. Willis James of New York, and two others, submitted a report early the next year,[121] and in March, 1885, an elaborate bill, prepared with the assistance of F. B. Hough, was presented to the legislature. In passing this bill, the legislature of New York created the most comprehensive forestry commission in the United States, one which was later copied by various states. Three years later, Michigan created a forestry commission to work out a policy for that state.[122]

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[114] *Am. Jour. of Forestry*, Dec., 1882.

[115] *First Ann. Report*, Ohio State Forestry Bureau, 1885.

[116] Pinchot, "Progress of Forestry"; *Agr. Yearbook*, 1899, 293-306, 304.

[117] *Report*, Kansas State Horticultural Society, 1886: *Proceedings*, Am. Forestry Congress, 1888, 7.

[118] *Proceedings*, Am. Forestry Congress, Dec., 1888, 7, 34.

[119] The American Forestry Congress at Cincinnati in 1882 had chosen a committee to memorialize the state legislatures in regard to the establishment of state forestry commissions. (*Proceedings*, Am. Forestry Congress, Apr., 1882, 14; Aug., 1883, 27.)

[120] *Agr. Yearbook*, 1899, 299.

California created a State Board of Forestry in 1885, which was two years later endowed with police powers, and granted the rather generous sum of $29,500 for salaries and expenses.[123] In the year 1885, Ohio established a State Forestry Bureau, while Colorado provided for a commissioner of forests. Kansas (1887) and North Dakota (1891) also provided for commissioners, that in North Dakota being known as the superintendent of irrigation and forestry. Even earlier than this, several of the Canadian provinces had fairly well-organized forestry departments.[124]

The various state forestry associations not only accomplished the creation of these commissions, forestry boards, etc., but they secured the passage of a great amount of other legislation dealing with forest fires, tree planting, and other matters, forest fire laws being often modeled after the New York law of 1885.[125] The boom days of timber culture had, of course, come before the year 1878, and during the period following that, with the realization of the general uselessness of such laws,[126] came the repeal of many of them; yet even down to the present time some of the states have been experimenting with bounties and tax exemptions.

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[121] *Report*, Forestry Commission of N. Y., Jan. 23, 1885.

[122] *Proceedings*, Am. Forestry Congress, 1888, 7.

[123] That California was not yet fully committed to a conservation policy is shown by her neglect of the Yosemite forests, which had been turned over by the Federal government to the care of the state. (S. Ex. Doc. 22; 52 Cong. 2 sess.)

[124] Hough, "Report on Forestry," III, 15.

[125] *Forest Circ.* 13. State laws should, of course, not be taken too seriously, for, as already stated, they were ineffective and seldom enforced.

[126] Preliminary Report on the Forestry of the Mississippi Valley, etc., Dept. of Agr., 1882.

OTHER INDICATIONS OF CONSERVATION INTEREST

Still other indications of interest in forest preservation appeared. In 1883, the Carriage Builders' National Association, at its eleventh annual convention, and the National Agricultural Convention of the same year, adopted memorials to Congress calling for various conservation measures. Several years later, the owners of about 93,000 acres of forest lands in the southwestern part of the Adirondack region formed the Adirondack League Club for the purpose of organized management of their lands—perhaps the first attempt at scientific private forest management in this country, on any large scale.[127]

It has now been shown that during the period from 1878 to 1891, the public timber lands were being stolen and plundered on a vast scale; that government officials and scientific men repeatedly called attention to conditions; and that a more vigorous sentiment in favor of conservation had developed. The response of Congress in regard to the two most iniquitous laws on the subject, the Free Timber Act and the Timber and Stone Act, has been indicated, but fortunately the policy of Congress was not so unwise in all ways as it was in regard to these two acts.

CONGRESSIONAL ACTION NOT SPECIFICALLY RELATING TO TIMBER LANDS: THE PUBLIC LANDS COMMISSION AND THE GENERAL REVISION ACT OF 1891

During the latter seventies, there was a great deal of agitation regarding the administration and disposal of the public lands, partly due to the influence of Schurz; and one result of this agitation was the establishment of a commission in 1879 to codify the land laws, to classify the public lands, and to make such recommendations as they might deem wise in regard to their disposal.[128] The commission appointed consisted of Thomas Donaldson, A. T. Britton, and J. W. Powell; the Commissioner of the Land Office and the Director of the Geological Survey being *ex-officio* members. They made a tour of the West, visiting, either as a body or in detachments, all of the western states except Washington, and early in 1880 presented a preliminary report,[129] with a bill for the complete revision of the land laws. While no results ever came of the bill proposed, the report itself, as later extended and revised,[130] was a valuable storehouse of information relating to the public lands, and doubtless it exerted some influence on the trend of legislation during the following decade, and even later. At any rate, most of the legislation which was not clearly dictated by the timber interests and their allies, followed out policies strongly urged by this commission.

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[127] *Am. Jour. of Forestry*, 1883, 238: *Proceedings*, Am. Forestry Assoc., 1890, 31.

[128] *Stat.* 20, 394.

[129] H. Ex. Doc. 46; 46 Cong. 2 sess.

Throughout the period under consideration, conservation activity in Congress generally followed the precedent laid down in the bill drawn by the Public Lands Commission in 1880, in attempting a complete revision of the entire system of land laws. Since forest preservation was not the main object sought in these efforts, and was in fact given little attention in the debates, it will be unnecessary to trace the history of the bills which appeared in every session of Congress, "To secure to actual settlers the public lands of the United States adapted to agriculture, etc." It suffices here to say that finally, in 1891, Congress accomplished a fairly complete revision of the land laws, including the repeal of the Timber Culture and Preëmption laws, the amendment of the Desert Land Law to make frauds less easy, the amendment of the Homestead Law to allow commutation only after fourteen months' residence and cultivation, the abolition of public land sales, and, most important of all, provision for setting aside forest reserves.[131]

FAILURE OF THE TIMBER CULTURE ACT

The Timber Culture Act, it will be recalled, had been amended soon after its passage and entirely revised in 1878. It was predestined to failure, however, and in the early eighties this became generally recognized. The law was intended for the prairie, or so-called semi-arid region, and most of the entries were made there; yet, in many of these sections, successful tree planting was not to be expected of settlers who came from the humid regions of Iowa or Illinois, or further east, or even from Europe. These settlers had no knowledge whatever of the climate or soil or of the kinds of trees adapted thereto, were generally ignorant of practical arboriculture, and poor in purse. The law was a fraud on the government, and even sometimes on the settlers, for no doubt some took up land in the belief that it must be good, since the government considered that it would grow trees.[132] There were some also who purposely used the law for the fraudulent acquisition of land.[133]

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[130] H. Ex. Doc. 47; 46 Cong. 3 sess.: H. Misc. Doc. 45; 47 Cong. 2 sess. Donaldson wrote the history of the origin, organization, and progress of the public land system, while Britton undertook the compilation of the land laws.

[131] *Stat.* 26, 1095.

Testimony regarding the act was almost unanimous in pronouncing it a failure and an instrument of fraud, and from 1884 to 1891 there were nearly always from one to a dozen bills before Congress providing for its repeal. Even the repeal of the act in 1891 did not end the difficulties, for two years later Congress had to pass a relief act,[134] providing that if trees were planted and cared for in good faith for eight years, final proof might be made without regard to the number of trees that survived; and *thirteen years later* the Commissioner of the Land Office announced that *nearly* all the timber culture entries had been adjusted.[135]

APPROPRIATIONS TO PREVENT FRAUDULENT ENTRIES

The repeal of the Preëmption Law and the amendment of the Homestead and Desert Land laws were steps in favor of a wiser disposition of the public lands; but eight years previously Congress had shown a disposition to suppress fraudulent entries, by appropriating $100,000 "for the protection of the public lands from illegal and fraudulent entry."[136] This was in addition to the regular annual appropriation to prevent timber depredations, and a sum of from $75,000 to $100,000 was provided annually until 1890, when the amount was raised to $120,000.[137] Furthermore, the Sundry Civil Act of 1885[138] contained an additional item of $20,000 for the expenses of hearings to determine fraudulent entries—an item which appeared regularly thereafter, bearing a sum of from $20,000 to $30,000.

[132] *The Nation*, Sept. 13, 1883, 220.

[133] Donaldson, "Public Domain," 541, 681, 683, 1088, 1164, 1221: *Report*, Sec. of Int., 1885, 203: *Report*, Land Office, 1885, 51.

[134] *Stat.* 27, 593.

[135] *Report*, Sec. of Int., 1906, 376.

[136] *Stat.* 22, 623.

[137] *Stat.* 26, 389.

[138] *Stat.* 23, 498.

ABOLITION OF PRIVATE SALE IN THE SOUTH

Perhaps more significant than these appropriations, and more important than the abolition of public sale in 1891, was the abolition of private sale in several of the southern states in 1889.[139] It will be remembered that in 1876 Congress had provided for the sale of all the public lands in Alabama, Mississippi, Louisiana, Arkansas, and Florida—some of the greatest timber states in the United States.[140] In 1888, Senator Walthall of Mississippi introduced a resolution providing that public lands in Mississippi should be subject to disposal only under the homestead laws until pending legislation relating to the public lands should be disposed of or Congress should adjourn. It seems strange that a man from a public land state should have wanted conservation in his own state, but the committee reporting the resolution added Alabama to the list of states, and also Arkansas, at the request of Senator Berry of that state. As thus amended, the resolution was agreed to in both Houses, and a few weeks later another joint resolution extended these provisions also to Florida and Louisiana.[141]

Meanwhile Senator Walthall had introduced a bill to withdraw the public lands in his state from sale at private entry. The Committee on Public Lands reported it, with amendments broadening its application to all public land states,[142] and as thus amended, Missouri being, however, excepted at the wish of a senator from that state, the bill passed the Senate without a comment, and later became a law. Such a complete reversal in the attitude of the southern senators is difficult to understand, but doubtless one factor in the moral transformation since 1876 was the fact that the most valuable timber lands had already been taken.[143] There had also, no doubt, been some growth in conservation sentiment.

INDIRECT ENCOURAGEMENT TO TIMBER STEALING

The General Revision Act of 1891 represented a long step forward in the administration of the public lands, but it contained some provisions which encouraged fraud. Not only did it extend the scope of the Free Timber Act, as already indicated, but it also contained a clause providing that "suits to vacate and annul any patent heretofore issued must be brought within five years of the passage of this act, and to vacate patents *hereafter* issued, shall be brought within six years of the issuance of the patent." This was a limitation on the right of the government to regain lands fraudulently acquired—a limitation of real importance, because of the small force of government agents and inspectors and the consequent delay in investigating cases.

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[139] *Stat.* 25, 854.

[140] Cross Reference, pp. 40-53.

[141] S. Res. 73; *Cong. Rec.*, Apr. 17, 1888, 3032; Apr. 23, 3221: *Stat.* 25, 622, 626.

[142] S. 2511; 50 Cong. 1 sess.: *Cong. Rec.*, Dec. 21, 1888, 420.

[143] Defebaugh, "History of the Lumber Industry in America," I, 371.

About a year before this, Congress had extended substantial assistance to fraudulent entrymen by providing more liberal regulations for filing affidavits.[144] In 1864, provision had been made that an applicant who, by reason of distance, bodily infirmity, or other good cause, was prevented from personal attendance at the district land office, might make his affidavit before the clerk of the court of the county of his residence.[145] In 1890, Congress provided that affidavits of various kinds might be made also "before any commissioner of the United States Circuit court, or before the judge or clerk of any court of record of the county or parish in which the lands were situated." These affidavits were commonly used in the fraudulent acquisition of land, and while the new regulations were a convenience to settlers, they made fraud easier to perpetrate and more difficult to detect.

THE FAILURE TO FORFEIT THE RAILROAD GRANTS

Like the above legislation, not specifically relating to forests, yet of great influence on the public timber lands, was the action of Congress in regard to the forfeiture of railroad land grants. During the seventies, a strong sentiment against further land grants developed, and during the next decade the question of forfeiture was always before Congress. On this question, Congress divided into three distinct groups. One group contended that failure to build any part of the road in the time specified in the grant should work a forfeiture of the entire grant.[146] Another group held that it should work a forfeiture only of the lands adjoining that part of the railroad completed "out of time," while a third group favored forfeiture only of the lands adjacent to railroads never completed. The House of Representatives generally took the second position, favoring a forfeiture of all lands unearned *in the time specified in the granting act*, while the Senate refused to forfeit more than just the land *never* earned. The difference between these two propositions was very great, for the House view meant the forfeiture of over 54,000,000 acres, while the Senate view involved the forfeiture of only about 5,000,000 acres.[147] After years of debate and squabbling, the House finally accepted the Senate view.[148]

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[144] *Stat.* 26, 121.

[145] *Stat.* 13, 35.

[146] *Cong. Rec.*, July 5, 1888, 5933-36.

The forfeiture of these grants was extremely important in its bearing on the public lands, including timber lands, but in Congress the question of conservation was not the main question at stake. This was clearly shown by the fact that forfeiture—a conservation policy—was most strongly opposed by the men from the East, especially New England, where conservation always received its strongest support. The line-up on the question of forfeiture did not indicate that the eastern men loved conservation less, but perhaps rather that some of them loved the railroads more. Some of them were perhaps considering the interests of constituents who owned stock in these railroads; some doubtless owned shares of the stock themselves; some were employed as railroad attorneys; and some doubtless merely had the conservative, capitalistic point of view which has more generally characterized the East.

Some logic and justice there was, it is true, in the position taken by the Senate. The government had permitted the railroads to continue construction after the expiration of the term of the grant, without declaring any forfeiture of the remainder of the grant, or indicating in any way that the offer of lands was no longer available. The government had not declared its attitude toward the unearned grants, had stood by while the railroads extended their lines; and now it might well have seemed unfair to declare a forfeiture of the land, even though it had been "earned" after the expiration of the time limit.

On the other hand, it is certain that some of the grants and various extensions of time had been secured fraudulently, that some of the grants were entirely too generous, and that some of the railroads had dealt most unfairly with the government and with the people. Furthermore, there is no doubt that some of the senators were under railroad influence.[149]

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[147] *Cong. Rec.*, July 5, 1888, 6013: H. R. 2476; 50 Cong. 1 sess.
[148] *Stat.* 26, 496.

THE RAILROAD ATTORNEY BILL

Some light seems to be thrown upon the railroad influence in the Senate, by the treatment which that body accorded a certain railroad attorney bill in 1886. Senator Beck of Kentucky introduced a bill in that year, imposing a heavy penalty upon any member of Congress who should serve as attorney or agent for a land grant railroad during his term of office. Such a provision as this would seem at the present time only reasonable and proper, yet it was fought by tactics of every kind. Edmunds of Vermont tried to bury it in the Committee on the Judiciary or in the Committee on Finance, and Hawley of Connecticut spoke at length against this "common and nasty defamation of Congress." Senator Mitchell of Oregon (later convicted of bribery in connection with the Oregon timber land frauds) tried to defeat the bill by adding a most radical amendment, providing a penalty, not only for serving a land grant railroad, but for serving any corporation or firm engaged in the manufacture of any article or product on which a customs duty was levied, or any article or product "in any manner now taxable or subject to taxation by any act of Congress." To make his intent perfectly clear, Mitchell added a final touch of the ridiculous by forbidding congressmen to serve any corporation or firm "engaged in raising milch cows or beef cattle or hogs, or in the manufacture or sale of butter or of the oleo oil from which is manufactured oleomargarine."

Senator Mitchell's amendment was knocked out, but the bill was later amended so that Senator Beck referred to it as a burlesque, and in this form it finally passed the Senate.

It would probably be unfair to assume that the opposition to this railroad attorney bill was prompted entirely by sinister motives, or that all the opposition party was composed of railroad attorneys who were just trying to save their hides. It is probably true that some of the opposition was due to a sincere belief that the bill was mere "fulmination, target practice, firing in the air," as Senator Ingalls of Kansas expressed it. Whether there was much real sincerity behind

[149] See footnotes, "Lumber Industry," I, 244.

the indignation expressed by certain senators at this "reflection on Congress" and "on the profession of the law," is open to question.

Although it would thus be unwise to attribute discreditable motives to all who opposed Beck's measure, evidence seems to indicate that some of the "distinguished senators" at least felt that this bill might endanger them. Senator Mitchell admitted that he had once been attorney for the Northern Pacific. Teller's opposition to this bill may be considered in connection with some of the decisions which he made while Secretary of the Interior. Hawley's speeches do not sound high levels of political philosophy. He spoke of the bill as "harsh and severe," and wondered if the offense aimed at was really a "crime, a *malum in se*," or whether it was merely "some proceeding in contravention of public policy," which could be "reached by a milder form of prohibition." If these men were absolutely free from railroad connections, why did they object to the bill, anyhow? It is difficult to see how the measure could have injured anyone whose skirts were clear, yet it was fought day after day with a stubbornness which indicates that more than a mere theoretical principle was at stake.

It should furthermore be noted that the party opposing this bill tried to avoid fighting in the open. Thus the first blow was Edmunds' attempt to have the bill referred to the Committee on the Judiciary, where it was understood the measure would be strangled. When the motion to refer was under consideration, Senator Beck said, "It might as well go to the tomb of the Capulets," and Senator Vance asked that the bill be read once more, so that he could "take a farewell of it." The next attempt was to have it referred to the Committee on Finance, also apparently known to be hostile to such legislation. A great variety of amendments were pressed, obviously with no purpose but the defeat of the bill; and by such means its practical defeat was finally accomplished.[150]

Forestry and forest conservation were never mentioned in the debates on the railroad attorney bill, yet this careful consideration seems appropriate because it throws light on the failure of Congress to forfeit the railroad grants. Railroad grants have been extremely important in their bearing upon the public timber lands, have been by far the most important cause of the concentration in timber ownership which in recent years has come to occupy so much attention.

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[150] *Cong. Rec.*, XVII, 5095, 5494, 5514, 5643, 5693, 5842, 5991, 5995-5999, 6037-6051, 6771, 8015; XVIII, 177-183, 210, 248, 278, 434, 952, 1004, 1038, 1047, 1065-1067, 1127-1139, 1149, 1154, 1199, 1227, 1242, 1284, 1314-1321, 1344-1360.

Fortunately the fiasco of 1890 was not the only action taken with regard to the railroad grants, for, already in 1887, the Secretary of the Interior had been directed to adjust all land grants,[151] and in 1880, Congress had restored 28,253,347 acres to the public domain by forfeiture of particular grants.[152]

TIMBER ON INDIAN RESERVATIONS

Congressional action in regard to the Homestead and Preëmption laws, public and private sale, and forfeiture of railroad grants, had no specific reference to timber lands. It is true that the Timber Culture Law was originally intended to exert an influence on forest conditions, but with the failure of the act to accomplish that purpose, it ceased to be of importance as a forest land measure; in fact, it was about the only law for the acquisition of lands which was never used in taking timber.

Legislation specifically relating to timber lands has already been considered somewhat in connection with the Free Timber and the Timber and Stone acts. In each case Congress refused to adopt a conservation policy. In certain other timber land measures, however, Congress showed a different tendency. This is indicated in some measure by the act of 1888, forbidding trespass on Indian reservations. Previous to 1888, there had been no law specifically prohibiting timber cutting on the Indian reservations. The act of 1859[153] set the penalty for depredations on military or "other" reservations, but it had not been interpreted to apply to Indian reservations, and, during the eighties, there was much complaint regarding the stealing of timber from the Indians. President Cleveland urged Congress to act, and finally, in 1888, after a great many unsuccessful attempts,[154] a law was secured extending the provisions of the act of 1859 to Indian reservations.[155]

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[151] *Stat.* 24, 556.

[152] *Report,* Sec. of Int., 1888, XIV.

[153] *Stat.* 11, 408.

[154] H. R. 6321, H. R. 6371; 46 Cong. 2 sess.: S. 2496, 47 Cong. 2 sess.: S. 1188, S. 1544; 48 Cong. 1 sess.: H. R. 3306, H. R. 6045, S. 1476, S. 1779; 50 Cong. 1 sess.

[155] S. Ex. Doc. 13; 49 Cong. 1 sess.: *Stat.* 25, 166.

APPROPRIATIONS FOR TIMBER PROTECTION

Perhaps in no way, however, was a conservation tendency more plainly shown than in the appropriations made for protecting the public timber lands. In 1878, it will be recalled, Congress increased the appropriation from $5000 to $25,000. In 1879, the amount was further raised to $40,000; in 1882, to $75,000, and in 1890, to $100,000, in addition to large sums already mentioned for preventing fraudulent entries. These appropriations, with several extra deficiency appropriations, enabled the Land Office to greatly increase its working force. In 1878, there were only eleven special agents working to protect the timber lands, while in 1885, there were twenty-three, and in 1890, fifty-five.[156]

The steadily increasing appropriations for the protection of timber lands do not indicate a conservation power in Congress growing with the same rapidity or the same steadiness. This is proved, not only by the passage of the Act of 1880, above described, and by the extension of the Free Timber and Timber and Stone acts previously discussed, but by other considerations as well. In the first place, the Sundry Civil Bill, in which these appropriations were made, always originated in the Committee on Appropriations, and in this committee the more populous eastern states were much better represented than in the Committee on Public Lands, which controlled so much land and timber legislation. Furthermore, the Sundry Civil Bill always included a great number of items, and was usually passed hurriedly, in the last days of the session, so that amendment was more difficult than in ordinary legislation. It was in the Senate that least favor was usually shown conservation measures, and the Senate was not quite free to block an appropriation bill. Thus, in the Committee on Appropriations an increase for timber protection had a fair chance of getting into the bill, and, once there, had a fair chance of remaining, even in a Congress which would have promptly eliminated any ordinary conservation measure.

The second consideration limiting the significance to be attached to these increasing appropriations, is the fact that government appropriations for most other purposes were also increasing rapidly. Between 1878 and 1891, the appropriation for miscellaneous expenses almost doubled,[157] and it seems that the sum given for timber protection might likewise have increased considerably, without indicating any great change of sentiment. The fact that it quadrupled is doubtless worthy of note.

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[156] *Report*, Land Office, 1878, 122: *Report*, Sec. of Int., 1885, 233: *Report*, Land Office, 1890, 80.

EFFORTS TO SECURE LAND GRANTS FOR FORESTRY SCHOOLS

Of only limited significance, also, was the interest shown in Congress regarding the matter of land grants to aid schools of forestry. In 1880, the Chamber of Commerce of St. Paul, Minnesota, sent out letters to various public men, asking for opinions as to the advisability of granting lands for a school of forestry. Several college presidents and other men answered favorably to the inquiry; in fact, only President Eliot and Professor Sargent of Harvard University opposed the scheme;[158] and in 1882, Senator McMillan of Minnesota introduced a bill providing aid for a school of forestry, to be established in St. Paul.[159] In the following year, Pettigrew, delegate from Dakota, asked for a grant of land for a school of forestry in Dakota;[160] and, throughout the eighties, there was usually at least one bill before Congress seeking a land grant to endow a school of forestry somewhere. No results came of any of these bills and they are probably not significant of any deep interest in forestry, the purpose behind at least most of them being an anxiety on the part of certain politicians to serve their constituents by securing a free grant of land.

APPROPRIATIONS FOR FORESTRY INVESTIGATIONS

Of a different character was the action in Congress regarding appropriations for forestry investigations. It will be remembered that

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[157] Statistical Abstract, 1891, 3.

[158] S. Misc. Doc. 91; 46 Cong. 2 sess. Professor Sargent gave two reasons why a school of forestry could not succeed: first, there were no teachers in America qualified to teach in such an institution; and second, there being as yet no demand for trained foresters, students would not care to prepare themselves for that work. It was, of course, true that there was as yet no demand for trained foresters and even foresters with European training found it necessary to take up other kinds of work on coming to America. (*Proceedings*, Am. Forestry Congress, 1883, 24.)

[159] *Cong. Rec.*, May 15, 1882, 3926.

[160] H. R. 7440; 47 Cong. 2 sess.

Congress had given $2000 in 1876 for such investigations, and as much more in 1877 to enable Hough to complete his work.[161] This appropriation did not take its place immediately as an annual grant, but $5000 was voted in 1880 to continue the investigations,[162] a like sum in 1881,[163] and in 1882 the amount was raised to $10,000.[164] The Division of Forestry was organized in 1881, and was recognized by Congress in 1886, when $2000 of the $10,000 given was specifically set aside for the chief of that division.[165]

In the appropriation of 1890, $7820 was given for salaries, and $10,000 for experiments in forestry and in "the production of rainfall."[166] In 1891, the sum for investigating forestry and "rainmaking" was raised to $15,000.[167]

THE FOREST RESERVE ACT

While these appropriations were of great importance in providing the information upon which any intelligent forest policy must be based, information and policy alike would have been of little use had the United States never possessed any national forests; and section 24 of the General Revision Act of 1891 provided that the President might from time to time set aside forest reservations in any state or territory having public lands wholly or in part covered with timber or undergrowth. This provision, definitely providing for national ownership of forest lands, a complete departure from the forest policy hitherto pursued, is by far the most important piece of timber legislation ever enacted in this country; and the circumstances of its enactment must be briefly discussed.

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[161] Cross Reference, pp. 42, 43.

[162] *Stat.* 21, 296.

[163] *Stat.* 21, 384.

[164] *Stat.* 22, 92.

[165] Everhart, "Handbook of United States Documents," 58: *Stat.* 24, 103.

[166] *Stat.* 26, 283, 286. Dr. Fernow gives the following account of the manner in which this appropriation was secured. He says that a syndicate of capitalists had built the Texas state capitol, taking 3,000,000 acres of semi-arid land in payment. One of the men in the syndicate became United States Senator, and, influenced by a Chicago engineer's contention that battles are usually followed by rain, secured the increased appropriation, and added to the chief's function that of making rain. Fernow became known in Washington as the "gapoguri," or rainmaker.

[167] *Stat.* 26, 1048.

EARLY ADVOCATES OF FOREST RESERVES

It will be recalled that public opinion, and even scientific opinion, during the seventies, had generally favored the sale of timber lands; but there had been a few signs of dissent from that policy. As early as 1867, the Commissioner of the Land Office, speaking of Oregon, declared that "lands producing timber of such valuable qualities and in such extraordinary quantities *should be preserved as timber lands through all time.*" In 1873, the committee of the Association for the Advancement of Science had so qualified their disapproval of a system of national forests as to practically grant the advisability of such a system. In 1877, Hough voiced approval of the Canadian system of selling stumpage with a reservation of the land,[168] and in a later volume of his "Report on Forestry" unreservedly urged that policy for the United States.[169] In 1878, Commissioner Williamson wrote to Secretary Schurz, "The soil should not be sold with the timber where the land is not fit for cultivation."[170] Secretary Schurz fully agreed with his commissioner in this matter, and persuaded Senator Plumb of Kansas to introduce a bill withdrawing all timber lands from sale, but the bill was lost in the Committee on Public Lands.[171] In the following year, Schurz urged the reservation of some of the redwood tracts in California,[172] and in 1880, the Public Lands Commission presented a bill reserving from sale all lands "chiefly valuable for timber," excepting those bearing minerals. The failure of this bill has been noted.[173]

Secretary Teller was not generally enthusiastic about forest reserves, although later, as senator, he introduced one bill which would have permitted their establishment. Commissioner McFarland, in 1884, urged the establishment of "permanent timber reserves in localities and situations where such permanent reservations may be deemed desirable."[174] In 1885, Secretary Lamar and Commissioner Sparks united in urging the reservation of a part of the public timber lands,[175] and throughout their administration gave unqualified support to that policy.

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[168] Hough, "Report on Forestry," I, 194.

[169] *Ibid.*, III. 8.

[170] *Report*, Sec. of Int., 1878, XV.

[171] S. 609; 45 Cong. 2 sess. See *Report*, Land Office, 1900, 110-112.

[172] *Report*, Sec. of Int., 1879, 29.

[173] Cross Reference, pp. 98, 99.

[174] S. 760; 47 Cong. 1 sess.: *Report*, Land Office, 1884, 19.

Lamar and Sparks were aided in their efforts by B. E. Fernow and E. A. Bowers, who entered the government service in 1886. Within a year after Fernow's installment at Washington, he formulated an elaborate bill for the withdrawal of all public timber lands. Bowers likewise had been in the government service only a year or two before he had worked out a complete plan for the management and disposal of the public timber lands,[176] and this plan he urged upon Congress in every way possible.

Lamar's successor, Vilas, evinced no special interest in forestry; nor did his successor, John W. Noble, during the first years of his administration.

During the eighties, at least one magazine published articles favorable to forest reserves, and later this became a very popular subject with various publications. In 1885, the American Forestry Congress, and in 1889 and 1890, the American Forestry Association, called for forest reserves, while in the latter year the American Association for the Advancement of Science sent a memorial to Congress, urging the policy of reservation. The California State Board of Forestry addressed a memorial to Congress in 1888, calling for reservations, but spoiled the effect of it all by asking for state ownership.[177]

Not only was there agitation during this period, but one of the states actually established public forests. In 1884, the legislature of New York appropriated $5000 for the employment of experts to work out a system of forestry for the state, and the commission appointed urged that the state should at least keep the lands which it still had, amounting to about 780,000 acres. No scheme of general purchase or condemnation was deemed wise, however, because of the great expenditure necessary, and the danger of artificially enhancing the value of privately owned timber lands. Five years later, however, New York passed a law authorizing the purchase of additional lands.[178]

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[175] *Report*, Sec. of Int., 1885, 45, 236.

[176] H. Ex. Doc. 242; 50 Cong. 1 sess.

[177] *The Nation*, Sept. 6, 1883, 201; *Proceedings*, Am. Forestry Congress, 1890, 19.

[178] *Report*, Forestry Commission of N. Y., 1885: N. Y. State College of Forestry, *Bul.* 5, 1902.

CONGRESS AND THE QUESTION OF FOREST RESERVES

Congress was, during this period, not entirely silent on the question of forest reserves. In the first place, some legislation was enacted with regard to Indian lands, which, although it had no direct reference to forest reserves, at least suggested the idea of a sale of timber with a reservation of the land. In 1883, such a sale of timber was recognized by Congress, and in 1889, the President was authorized to permit the Indians on reservations to cut and sell dead timber on their lands. The act of 1890 went still further, in authorizing the Secretary of the Interior to permit the Menomonee Indians in Wisconsin to cut "all or any portion" of the timber on lands reserved for them, and sell it at public auction.[179]

Of congressional activity specifically relating to forest reserves, the first example was probably Representative Fort's forest reserve bill introduced on February 14, 1876. On the very next day, in the consideration of the bill to open up the southern lands, Senator Boutwell offered an amendment which, by providing for the sale of timber without the land, would practically have meant the reservation of all the southern timber lands, although it specifically reserved only live oak and red cedar. Of course this amendment did not pass. Secretary Schurz's forest reservation bill of 1878 likewise failed. In January, 1880, a bill, introduced by Representative Converse of Ohio, authorizing the President to reserve certain timber lands in California, passed the House without any opposition, but received no attention in the Senate. The following year Converse brought this bill up in the House again, but it was not discussed. In 1882, Butterworth and Sherman, both of Ohio, introduced bills into the House and Senate, but both were lost in committee.[180]

In the forty-eighth Congress, forest reserve measures were introduced by Senators Cameron of Wisconsin, Sherman of Ohio, Miller of New York, and Edmunds of Vermont; and by Representatives Deuster of Wisconsin, and Hatch of Missouri. Senator Miller's proposal to withdraw all timber land pending investigation by a committee, was accorded a favorable committee report, while the bill pressed by

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[179] *Stat.* 22, 590; 25, 673; 26, 146.

[180] Cross Reference, p. 45. *Cong. Rec.*, Feb. 15, 1876, 1083; Jan. 27, 1880, 547; H. R. 1272, H. R. 6315, S. 1826; 47 Cong. 1 sess.

Senator Edmunds, "To establish a reservation at the headwaters of the Missouri River," passed the Senate with little opposition.[181]

The following year, Edmunds promptly brought his proposal up again, and again it passed the Senate without comment, but made no headway in the House. A general forest reservation bill introduced by Sherman was not reported. In 1886, Representative Hatch of Missouri introduced another reservation bill, but no results accrued.[182] Generally, the forty-ninth Congress gave very little attention to the question of forest reserves.

In 1887, however, forest reserves were a popular subject in Congress. Edmunds appeared with his favorite bill for a reserve at the head of the Missouri River, but this time it was lost in committee, as were also measures proposed by Senator Sherman of Ohio and Representative Markham of California. The following year, Hatch made another effort, but it failed to elicit a report. Bills introduced by Representative Joseph of New Mexico, E. B. Taylor of Ohio, and Holman of Indiana also failed.[183] In this session, however, the House adopted two resolutions calling for plans for the management and disposition of timber lands, one of these resolutions calling specifically for the secretary's plan for reserving forests. Inspector Bowers and Assistant Secretary of the Interior Muldrow submitted elaborate plans, but the House took no further action.[184]

Holman's bill for the general revision of the land laws, in 1888, contained a provision that all timber lands should be classified as such, and the timber sold without the land, at not less than appraised value; and also a section providing specifically for the creation of forest reserves. This bill passed the House with both these sections intact; in fact, the forest reserve section received almost no attention in the debates.[185]

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[181] S. 1188, S. 1258, S. 1824, S. 2451, H. R. 5206, H. R. 4811: *Cong. Rec.*, Feb. 20, 1885, 1930; June 2, 1884, 4743, 4745.

[182] S. 551, S. 581, H. R. 2946; 49 Cong. 1 sess.: *Cong. Rec.*, July 8, 1886, 6648, 6649.

[183] S. 540, S. 598; 50 Cong. 1 sess.: H. R. 10430; 49 Cong. 1 sess.: H. R. 1982, H. R. 3239, H. R. 11037; 50 Cong. 1 sess. Weaver of Iowa also introduced a bill "To further amend the public land laws, and for the preservation of the natural forests on the public domain, the protection of water supply and for other purposes;" but it seems doubtful whether this really meant the creation of forest reserves, for Weaver expressed himself, in another connection, as opposed to separating the timber from the fee in the land. (H. R. 1352; 50 Cong. 1 sess.: *Cong. Rec.*, June 25, 1888, 5563.)

[184] *Cong. Rec.*, Jan. 18, 1888, 553; Mar. 24, 1888, 2371: H. Ex. Doc. 144, 242; 50 Cong. 1 sess.

In 1889, Taylor and Sherman appeared as usual with proposals for reservation, and the next year another western man, Representative Clunie of California, announced his approval of such a policy. Early in the latter year, President Harrison transmitted to Congress a memorial of the American Association for the Advancement of Science, calling for forest reservations, and in pursuance of the recommendations of this Association, Representative Dunnell introduced a bill into the House, but no results were secured.[186]

In the light of later events, the action of Congress in regard to some of these bills seems rather strange. It is true that most of the bills introduced never emerged from the committee, and no general reservation measure ever passed either house, but the Senate twice approved Edmunds' proposal for a reserve at the head of the Missouri, while the House passed one bill providing for reservations in California; and in each case this was done *without any particular discussion or opposition.* As already stated, the forest reserve provision of Holman's general revision bill received almost no attention in the debates. The entire attitude of Congress indicates a failure to foresee the results which were likely to follow from the adoption of a forest reservation policy.

Whatever may have been the reason for the lack of a more vigorous opposition to these forest reserve proposals, it is fairly certain that no general forest reservation measure, *plainly understood to be such,* and unconnected with other measures, would ever have had the slightest chance of passing Congress; and when such a measure was finally secured, it was not through the initiative of Congress, but rather because Congress had no good opportunity to act on the proposition.

THE PASSAGE OF THE FOREST RESERVE ACT

In 1891, the question of a general revision of the land laws, particularly the repeal of the Timber Culture, Preëmption and Desert Land laws, had been vexing Congress for a decade; and a determined effort was being made to effect some kind of a revision. Late in the second session of the fifty-first Congress, a conference committee of the two houses was appointed to adjust differences on one of these general revision bills, and Secretary of the Interior Noble, who had been influenced by Fernow and Bowers, and perhaps by other members of the American Forestry Association, asked this committee to insert a rider authorizing the President to establish reserves.[187]

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[185] H. R. 7901; H. R. 778; 50 Cong. 1 sess.

[186] H. R. 705, H. R. 7026, H. R. 8459, S. 1523; 51 Cong. 1 sess.: *Proceedings*, Am. Forestry Assoc., 1891-92-93, 39.

Fortunately this conference committee was composed of men most of whom were at least not predisposed to fight such a measure. Of the Senate conferees, Plumb of Kansas was mainly interested in other kinds of public lands, but, coming from a prairie state, he understood the value of a timber supply and had shown a disposition mildly favorable to timber conservation. Walthall of Mississippi had taken an active interest in at least one conservation measure—that providing for the abolition of private entry in the South; while Pettigrew of South Dakota had shown no hostility to forest conservation; in fact, Pettigrew has claimed to be the author of the forest reserve section. Payson of Illinois and Pickler of South Dakota, representing the House, were actively favorable to forest reserves, and Holman of Indiana could be depended on to favor any proposition for better land administration, although, like Senator Plumb, he was more interested in other public land questions. Thus of the six conferees, at least four would have been expected to favor the establishment of forest reserves, while none were likely to oppose. The personnel of this committee was one link of the chain of unusual circumstances which rendered the final passage of the forest reserve measure possible.

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[187] H. R. 7254; 51 Cong. 1 sess. In crediting Secretary Noble with the introduction of this forest reserve section, the writer is following the usual account of the matter. Recently, however, Senator Pettigrew has advanced the claim that it was he, and not Noble, who should be credited with this action; that Noble had nothing to do with it. In spite of this claim, and in spite of the fact that the writer is unable to secure absolute proof to back up his belief, he nevertheless adheres to his opinion that Secretary Noble should receive the credit. Several considerations point to such a conclusion. In the first place, Secretary Noble repeatedly asserted that it was he who had inserted that section. He told Mr. Bowers of New Haven that he had done it; and in at least one public speech he spoke of his "official action" in connection with the forest reserve section. Most other writers of the time also seemed to assume that Noble had been responsible. Fernow, writing in 1897, spoke of him as the author.

During all this time, apparently, Pettigrew made no claim to the authorship of the section; and, when President Cleveland established a number of preserves in 1896, it was Pettigrew who led the forces that called for their suspension. There is some evidence that Pettigrew was not unfriendly to the reservation policy previous to 1897, but in that year, as will be shown in the following chapter, he did everything possible to secure the suspension of the reserves Cleveland had created; and some things he said in Congress indicate that he really favored entire abolition of the reserves, although, by securing the passage of the act in 1897, he did a great service for conservation.

On this question, the following letter from Dr. Fernow seems pertinent: "To me it seems strange that Pettigrew should persistently have kept in the dark that I never knew of his interest even in the subject. Nor has Mr. Bowers any such recollection. My memory is, that at the time the story was current, Mr. Noble declared at midnight of March 3, in the Conference Committee, that he would not let the President sign the bill (for abolishing the timber claim legislation) unless the Reservation clause was inserted. Since these things happen behind closed doors, only someone present can tell what happened, Secretary Noble or one of the conferees. All we, that is, Bowers and myself, can claim is that we had educated Noble up to the point." (*Proceedings*, Am. Forestry Assoc., 1893, 36 et seq.: *Science*, Mar. 26, 1897, 490.)

Secretary Noble's efforts were successful and a twenty-fourth section was tacked onto the conference bill, providing for the creation of reserves. This procedure—the introduction of a new provision in a conference report—is contrary to the rules of Congress. The bill as amended, with its twenty-four sections, was presented to the Senate a few days before the close of the session.[188] Senator Plumb, who had charge of the bill, insisted on its speedy consideration, and without even being printed, and with scarcely time for a comment, the bill passed the Senate.

The Senate had always been rather hostile to conservation measures, and the passage of this bill, thus, without any opposition, was possible because of several favoring circumstances. The haste with which Congress almost always acts near the close of a session was aided by the great length of the bill, which made any careful study of its various provisions difficult; while the great variety of provisions involved, affecting every kind of public land and making various changes in the different laws, rendered it difficult to pick out any one clause for attack. Also, there were a great number of compromises in the bill, the forest reserve clause being to some extent balanced by the clause broadening the scope of the Free Timber Act. Furthermore, most of the provisions of the bill, in fact all but the forest reserve provision, had been debated over and over, and members were so familiar with the main points involved that they were probably less careful to scrutinize the conference bill than they would have been to examine an ordinary bill. Doubtless very few, if any, of the members realized what important results were to flow from the passage of this little forest reserve section. The attitude of Congress in regard to subsequent as well as previous legislation indicates clearly that very few of the members of either house realized how extensively the President would use the power conferred here. Finally, it must be considered that this was a bill reported from a conference committee, a sort of bill not easy to amend. Any amendment would have delayed the bill, perhaps defeated it; and on some of the items, as, for instance, the repeal of the Preëmption and Timber Culture acts, the public demand had in the course of ten years gathered considerable power. This last consideration was doubtless of greater weight in the House, where the members are usually more in need of campaign material, and at this time feared to close another session without having accomplished some kind of a revision of the land laws.

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[188] *Cong. Rec.*, Feb. 28, 1891, 3614; Mar. 2, 1891, 3685. It is interesting to note that as early as 1876, a law very similar to this forest reserve provision had been passed in the Hawaiian Islands—destined later to become a part of the United States.

Somewhat strangely, the bill encountered greater opposition in the House than in the Senate. Dunnel of Minnesota distrusted the entire bill because it had not been printed, while McRae of Arkansas opposed section 24 for the very Democratic reason that it put too much power in the hands of the President; but Payson carried the measure safely through the discussion. This was on February 28. When the bill came up again on March 2, there was no time for discussion and it passed without a comment.

Thus the passage of the Forest Reserve Act, the first important conservation measure in the history of our national forest policy, cannot be credited to congressional initiative, but to a long chain of peculiar circumstances which made it impossible for Congress to act directly on the question. If the conference committee, like most public land committees, had included a majority of men hostile to conservation; if the forest reserve provision had been attached to anything but a conference bill; if the question had come up at the beginning instead of the close of the session; if there had been less of a public demand for revision of the land laws; if the bill had been a short one, with only a few clauses; if Congress had been a little less familiar with the general provisions of the omnibus bill under discussion and so more careful to scrutinize them, or if members had realized what important results were to follow; if any one of a score of possible contingencies had prevailed, the passage of a general forest reserve measure at this time would probably have been impossible. Congress was not yet fully converted to the principle of forest reservation, as later developments clearly show.

CHAPTER III

THE FOREST RESERVES FROM 1891 TO 1897: NEED OF PROTECTION AND ADMINISTRATION

THE SITUATION IN 1891

Before proceeding to a consideration of the period following the year 1891, it will be profitable to halt and take an inventory of results accrued at that date—note just what had been accomplished in the period since 1878. There had been, in the first place, a notable improvement in some of the laws not specifically applying to timber on the public domain. Public sale and private entry had been abolished. Perhaps more important, the repeal of the Preëmption Law and the amendment of the Commutation Homestead and Desert Land laws had been accomplished, and more liberal appropriations made to prevent fraudulent entries; although these gains were in some degree offset by the act allowing affidavits and proofs to be made before commissioners of the United States courts, etc., and by the provision limiting the time within which suits must be brought for cancellation of patents.

As to the laws specifically applying to timber lands, the situation in 1891 was not so favorable. Appropriations for forestry investigations had been greatly increased, but the Free Timber and Timber and Stone acts were still in force, while a still worse free timber provision had been added in the Permit Act of 1891. (Only a year later the Timber and Stone Act was extended to all public land states.) As has been shown, neither of these acts provided for the honest acquisition of timber for general commercial purposes, and the extension of their provisions was merely a legalization of plundering which, with the larger sums available for protection, might otherwise have been prevented. Thus the laws for the disposal of timber on the public domain were worse in 1891 than they had been in 1878, just as they had been worse in 1878 than ever before. Congress had shown utter incapacity to deal intelligently with the public ti[illegible]ope for future conservation must center in the provision [illegible] ou[illegible]ke some of the timber lands out of thè hands of Congress—t[illegible] prov[illegible]on enabling the President to set aside forest reserves.

THE CREATION OF NEW RESERVES

The President's new power was not long unused. Within less than a month after the passage of the Forest Reserve Act, President Harrison proclaimed the Yellowstone National Park Reserve, adjoining Yellowstone Park in Wyoming,[1] and in September of the same year added still another section to the reserve, giving it an area of over a million acres.[2] In October, he set aside the White River Plateau Reserve in Colorado, of over a million acres,[3] and the following year several reserves in various regions of the West. President Harrison established altogether fifteen forest reserves, embracing an estimated area of over thirteen million acres.[4]

President Cleveland, in the first year of his second administration, established two reserves in Oregon, embracing nearly five million acres; but here he stopped, and took no further action for several years—because he found that the reservation of these lands secured no special protection. Congress had made no provision for their protection, and they stood in the same position as unreserved lands.

THE NEED FOR PROTECTION OF THE RESERVED LANDS

The need for protection of the new forest reserves was very soon perceived and constantly urged upon Congress. In 1891, Secretary of the Interior Noble pointed out the necessity for better care of the new Yellowstone Reserve.[5] In the same year, and repeatedly thereafter, the American Forestry Association urged legislation on the subject.[6] In 1893, Commissioner of the Land Office Lamoreux called attention to the inadequacy of the laws and appropriations for protecting the reserves from timber trespassers and forest fires.[7] Almost every y[redacted]ommissioner of the Land Office and the Secretary of the Int[redacted]de this appeal for legislation; and Cleveland, in his second annual message said, "I concur with the secretary that adequate protection be provided for our forest reserves, and that a comprehensive forestry system be inaugurated."[8] In 1893, the Secretary of Agriculture complained of the wasteful lumbering and destructive fires on the forest reserves,[9] and the following year the American Association for the Advancement of Science adopted a resolution calling for better administration and protection.

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[1] *Stat.* 26, 1565.

[2] *Stat.* 27, 989.

[3] *Stat.* 27, 993.

[4] *Report*, Land Office, 1894, 438.

[5] *Report*, Sec. of Int., 1891, CXXXVIII.

[6] *Proceedings*, Am. Forestry Assoc., 1891-92-93, 12; 1894-95-96, 75.

[7] *Report*, Land Office, 1893, 79.

Criticism of the inaction of Congress was accompanied by definite suggestions as to the best methods of protection. Perhaps no proposal was more often urged than that of somehow linking up the forest service with the military service of the United States. In 1890, the Secretary of War had complied with the request of the Secretary of the Interior that troops be sent to the protection of some of the national parks in California, and each year for several years thereafter, troops had been detached for this purpose.[10] In 1894, Secretary of the Interior Hoke Smith and Commissioner Lamoreux called upon the Secretary of War for troops to protect the new forest reserves against fires and other encroachments, particularly against the sheep men, who sometimes did great damage to the forests by setting out fires to improve the grazing for their flocks. The acting Secretary of War declined to make the details, however, basing his refusal upon the opinion of the acting judge advocate general of the army, that the employment of troops in such cases and under the circumstances described by the Secretary of the Interior, not being expressly authorized by the constitution or by act of Congress, would be unlawful. Perhaps this decision was justified by a strict interpretation of existing laws, although it seems that the law of 1827 authorizing the President to take proper measures to preserve the live oak timber on the public lands, might have been stretched to include the protection of timber generally without subverting the government. Certain it is that this decision prohibited the adoption of a very economical and efficient means of timber protection.

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[8] *Report*, Land Office, 1893, 27.

[9] *Report*, Sec. of Agriculture, 1893, 31.

[10] *Report*, Sec. of Int., 1893, LX.

A somewhat different plan for using the military [illegible] of the country was that of Professor Sargent, who suggest[illegible]tablishment of a chair of forestry at the United States Military Academy at West Point, with control of the forests by educated officers, study at the academy to be supplemented by practical study in the woods. This scheme was favored by the American Association for the Advancement of Science, and by several men of influence, among them George Anderson, captain of the United States Army in charge of Yellowstone Park. Roosevelt gave only qualified approval, while Pinchot, Fernow, and Bowers opposed the plan, and it never received serious consideration in Congress.[11]

EFFORTS IN CONGRESS TO SECURE BETTER PROTECTION

Petitions appeared in Congress praying for better protection of the forest reserves, and some efforts were made to secure this. In 1892, Representative Caminetti of California submitted a resolution calling for a report as to the condition of the forest reservations in California.[12] In the same year, a bill introduced by Senator Paddock of Nebraska, "To provide for the establishment, protection, and administration of public forest reservations," was favorably reported in the Senate, but made no further progress, although strongly urged by the American Forestry Association. Similar measures introduced by Holman of Indiana, McRae of Arkansas, and Townsend of Colorado, were not even reported.[13]

THE McRAE BILL

The bill which aroused most interest and debate was one introduced and vigorously urged by the man who had made almost the only speech against the reservation measure in 1891—McRae of Arkansas. McRae's bill contained a number of excellent provisions, besides the one providing for the protection of the reserves. In the first place, it provided for the sale of timber to the highest bidder at not less than appraised value, the receipts from timber sales to be used for the protection of the reserves. In the second place, the Secretary of War was authorized to detail troops to protect the reserves when necessary; and, in the third place, provision was made for restoring to entry any agricultural lands included within forest reserves. An amendment inserted by the committee reporting the bill provided that the section relating to the sale of timber should apply not only to the forest reserves, but to all timber lands on the entire public domain.[14]

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[11] *Century Magazine*, Feb., 1895, 626.

[12] H. Report 2096; 52 Cong. 1 sess.

[13] H. R. 102, S. 2763, S. 3235, S. Report 1002; 52 Cong. 1 sess.: H. R. 10101, H. R. 10207; 52 Cong. 2 sess.

Although approved by the Commissioner of the Land Office, by the Secretary of the Interior, and by the American Forestry Association, this wise and conservative measure encountered a tremendous amount of opposition. A variety of objections were urged. In the first place, many thought, or at any rate argued, that it would stimulate forest destruction. Pickler of South Dakota declared: "Our timber lands in the West will be denuded of timber. . . . The very object of the law, which is the setting apart and protection of these timber reservations, will be defeated." Hermann of Oregon declared the bill should be entitled "A bill to denude the public forest reservations." Simpson of Kansas rated it a "dangerous measure," particularly on the ground that it allowed the Secretary of the Interior so much power. "Not only," he said, "does it allow the Secretary of the Interior to sell timber on the lands in these reservations which have been set aside for the special purpose of holding the moisture, but also it allows him absolutely to sell the timber on any public lands in any part of the United States."

Doolittle of Washington called the bill an "infamous proposition," with "no redeeming features, except the one permitting the employment of the army." "From my experience and observation in these matters," he explained, "I know it to be true that if the lumberman is once permitted to go upon a quarter section of land, having purchased the stumpage, or the timber from that land, he will not confine himself to his proper limits, and it is all nonsense to expect that this timber can be preserved at all if you let down the bars for a single moment. You might as well turn a dozen wolves into a corral filled with sheep and expect the wolves to protect the sheep as to expect your timber to be protected if you permit the lumbermen to go upon the reservation at all." Coffeen of Wyoming expressed a similar view: "The bill, while it purports to protect timber, is calculated in every provision from title to terminus to destroy our timber through the operations of corporations and mill owners who are authorized to buy the timber under the provisions of the bill."

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[14] H. R. 119, H. Report 78; 53 Cong. 1 sess.: *Cong. Rec.*, Oct. 10, 1893, 2371 et seq.; Oct. 12, 2430 et seq.

A second objection urged against McRae's bill was that it would throw the timber supply of the West into the hands of large corporations and monopolists. Hermann argued that it would benefit mainly the "mill men and the large syndicates and great landowners, or speculators and capitalists." Simpson considered that "such legislation would simply be in the interest of the corporations that are hungering to get possession of the public domain." Rawlins of Utah said the bill would merely be "an inducement to monopolies to gobble it [the timber] all up and dispose of it to the people at such prices as they themselves may dictate." Hartman of Montana argued in similar vein: "You say to corporations that are able to purchase this timber, 'You may have whatever timber you desire.' But at the same time you say to the honest settler, the hard-handed miner, or farmer, or stock raiser, 'You can not have a foot of this timber, unless you purchase it in competition with these corporations; unless you do that you must either steal the timber or freeze to death.' "

Some of the western men were doubtless sincere in their fear of monopoly, and in their belief that the sale of timber would lead to forest destruction. Few men in Congress, even as late as this, had yet grasped the principles that govern intelligent forest administration. Few were able to understand the wisdom of selling the timber while retaining the ownership of the land; and many still had an entire misconception as to the proper use and management of forest reserves. Many seemed to think that the forest reserves should be locked up, preserved sacred and inviolate from every valuable use. They did not yet understand that scientific forest administration implies not only protection, but also the *use* of mature timber under such restrictions as to prevent injury to the growing trees.

While thus some of the western representatives were sincere, even if misguided, in their fear that the sale of timber would stimulate forest destruction, others doubtless used this argument as a cloak to hide their real motives. McRae distrusted them. "Instead of proposing fair amendments," he said, addressing himself to the opposition, "you gentlemen have, in the face of the amendments suggested, spent all your time denouncing the bill as unjust and infamous. . . . You have aimed your talk at the immaterial parts to consume time. These arguments have come from gentlemen who have special timber privileges already and who desire those privileges continued. . . . Whether intentionally or not, you who oppose this bill are the aides of the monopolists who have had the special privilege of cutting government timber for nothing. You will deceive nobody by denouncing those benefited by your opposition if successful."

Without a doubt, McRae here exposed one of the main reasons why some of the western men opposed the bill. Settlers and miners had become accustomed to free timber and were of course opposed to any legislation which required them to pay for it. Bell of Colorado and Hartman were frank in stating that this was an important reason for their opposition. Hartman pronounced the bill "infamous in the extreme." "It means," he said, "that thousands of miners all over our western country will be precluded from obtaining the timber necessary for the shafts in mines which they are working. It means too, that settlers engaged in agriculture, in stock raising, and in various other industries pursued in the West will be compelled either to violate the laws of the United States and become timber thieves or else freeze to death." Rawlins offered an amendment giving settlers and miners free timber for firewood, fencing or building purposes.

Mining interests feared the bill on other grounds, however, than merely that it would deprive them of free timber. As Hermann pointed out, the reserves had not yet been opened to mining, and any provision for the protection of the reserves would result in shutting out the miners altogether. Without a doubt it was the situation of miners which caused a large share of the hostility to the McRae bill, and to the forest reserves in general. If the bill had included a section directing the Secretary of the Interior to eliminate all mining and agricultural lands from the reserves, it might easily have passed, but as it was, it aroused entirely too much opposition; and Coffeen finally brought the opposition to a climax by offering an amendment abolishing all reserves except those in the three coast states—a proposition which Bell heartily endorsed. Perhaps fortunately, this did not come to a vote, and some days later the bill was withdrawn.

In the next session, McRae again brought his proposal before the House, accompanied by a favorable report from the Committee on Public Lands.[15] This time, however, the measure was framed so as to allow the Secretary of the Interior to give free timber to settlers, and the vote on the resolution of Outhwaite of Ohio, calling up the bill—117 ayes to 54 nays—indicates that it was generally favored, although, no quorum being present, it was not discussed and never came up again during the second session.[16]

In the third session, McRae resumed his efforts to push House bill 119 through Congress. This time the bill had been amended to permit mining in the reserves, while the section providing for sale of timber on the general public lands had been eliminated; and these modifications caused a complete reversal in the attitude of the western congressmen, who veered around to a favorable attitude, influenced mainly, no doubt, by the provision permitting mining in the reserves.[17]

The chief opposition to the bill came from Wells of Wisconsin, who opposed "every principle of the bill," and predicted that "timber thieves and land sharks" would take all the timber if they were permitted to go upon the land. He felt sure that there was a "smell of boodle" behind the bill. "Why, sir," he exclaimed, "it is backed up, as I said here recently upon this floor, by men who have enriched themselves by plundering the public domain and by men who know nothing of forestry. . . . I do not want to stand here a party to the upbuilding of, and will not stand sponsor for the creation of another brood of saw-log statesmen, such as have disgraced this floor for thirty years." Pickler opposed the bill because it contained a section limiting the purposes for which reserves might be created, and because it permitted lands unnecessarily included in a forest reserve to be restored; and on the first day of debate, he and Wells, by a determined filibuster, managed to prevent favorable action. Ten days later, however, it was again brought up, and passed by a vote of 159 to 58, not an opposing vote coming from the states west of Kansas and Nebraska. The bill was thus generally regarded as unfavorable to conservation, although the lines were not drawn with absolute clearness.

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[15] H. Report 897; 53 Cong. 2 sess.

[16] House Journal; 53 Cong. 2 sess., 521.

[17] *Cong. Rec.*, Dec. 6, 1894, 85; Dec. 7, 111 et seq.; Dec. 17, 364 et seq.

e bill at this stage was one which latter-day conserva-
d generally have approved, and certainly it was such a
ould have improved the situation of the forest reserves,
the opposition came from conservation quarters. Doubt-
th[illegible]o be partly explained by distrust of the amendment per-
ng[illegible]ning in the forest reserves. As has been pointed out pre-
sly, many conservationists had an idea that the forest reserves
be shut up and guarded against every intrusion, that anyone
itted to go upon the reserves would be certain to do injury.
erience with western timber trespassers lent considerable support
is belief, but it was, of course, impossible that the reserves could
be maintained on any such basis of non-use, because it aroused
ely too much western hostility. The miners felt that they had a
t to go upon the land wherever minerals were to be found, felt that
operations were not inconsistent with the purposes for which the
ves were set aside. Some of the conservationists did not under-
d western conditions and could not fully appreciate the western
t of view.

might seem that the McRae bill as it finally passed the House,
eded about as much to the West as should have been expected,
when it was referred in the Senate, Teller of Colorado, of the
mittee on Public Lands, immediately brought up a substitute bill,
h differed widely from the House bill.[18] The Senate bill repre-
ed fairly well what the western men considered right and proper in
ing with the forest reserves, and for that reason it is interesting
ote some of its provisions. In the first place, it imposed a limita-
on the purposes for which forest reserves might be created. They
nt be created to secure favorable conditions of water flow, or to
re a continuous supply of timber *for the people in the state or*
itory where the reserves were located. Thus, the creation of re-
es to secure a continuous supply of timber *for the public generally*
not permissible under Teller's bill. In the second place, the inclu-
of agricultural or mineral lands was forbidden, and any land
wn to be mineral *must* be restored to entry. The reserves were
ned to mining and prospecting. Free timber was provided for set-
s, miners, residents, and prospectors, and also for the construc-

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Cong. Rec., Feb. 26, 1895, 2779, 2780.

tion of bridges, schoolhouses, and other public uses; wh[illegible]s in the forest reserves were allowed free pasture in the reserv[illegible]sion was made that any entryman or settler included within a f[illegible]rve might have his property appraised and paid for by the S[illegible]y of the Interior, or he might relinquish his claim and select an[illegible] tract outside, which should be *patented* to him, regardless of the[illegible]atus of his claim within the reserve. Some of these provisions seem exceedingly generous, but the bill passed the Senate without amendment and without comment. Perhaps fortunately, the House never had an opportunity to vote on the substitute.

Thus the three sessions of the fifty-third Congress closed without anything having been accomplished for the protection of the forest reserves. On the second day of the fifty-fourth Congress, however, H. R. 119 was given its accustomed place on the House calendar,[19] but was given no attention for over six months. Finally, on June 10 of the following year, it passed the House with almost no comment, but never emerged from the Senate Committee on Public Lands. McRae's attempts thus ended in failure. Legislation for the forest reserves was destined to come in a somewhat different manner.[20]

THE COMMISSION OF THE NATIONAL ACADEMY OF SCIENCES, AND CLEVELAND'S PROCLAMATIONS OF FEBRUARY 22, 1897

The American Forestry Association had been active from the very first in its efforts to secure forest protection, and finally the executive committee of that association asked the Secretary of the Interior, Hoke Smith, to call upon the National Academy of Sciences for a commission of experts to make a careful study of the entire forestry question. About this time, the *Century Magazine* published an editorial also calling for such a commission, and the editor, R. W. Johnson, even personally requested Secretary Smith to ask the National Academy for a commission of investigation. In response to these requests, or prompted by other influences, Secretary Smith wrote to

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[19] Bills were also introduced by Senators Teller of Colorado, Allen of Mississippi, and Dubois of Idaho, and by Representative Johnson of California; but no results accrued from any of them. It is difficult to explain the introduction of such a bill by Senator Teller, for, at least in later years, he was one of the most radical opponents of the forest reserve policy. (S. 914, S. 2118, S. 2946, H. R. 9143; 54 Cong. 1 sess.: *Proceedings*, Am. Forestry Assoc., 1896, 40, 47.)

[20] *Cong. Rec.*, June 10, 1896, 6410, 6411.

Wolcott Gibbs, president of the National Academy of Sciences, calling for an official expression from the Academy upon various questions relating to forestry and the forest reserves.[21]

President Gibbs, in response to this letter of inquiry, appointed a commission composed of Professor C. S. Sargent, Alexander Agassiz, Henry L. Abbot—an eminent engineer and hydrographer—Professor William H. Brewer of Yale University, Arnold Hague of the United States Geological Survey, and Gifford Pinchot. While these men were willing to serve the government without compensation, Gibbs suggested that $25,000 should be appropriated to cover the expenses of their investigation, and in the Sundry Civil Bill of 1896, $25,000 was allowed for that purpose.[22]

In July, 1896, the commission began its work, visiting most of the forest reserves, and devoting three months of travel and study to the investigation.

In February, 1897, Professor Sargent, chairman of the commission, addressed a letter to President Gibbs of the Academy of Sciences, recommending the establishment of thirteen new reserves, to embrace an area of over 21,000,000 acres.[23] The issue of this letter before the report of the commission was entirely completed—it was not completed until May 1, after the close of Cleveland's administration—was opposed by Gifford Pinchot, who believed the recommendation of new reserves should be accompanied by a statement of the objects sought, and by definite plans for the administration of the new lands. Pinchot saw the danger involved in thus "locking up" millions of acres of land, with no provision for its use or protection. Upon receipt of Professor Sargent's letter, however, President Cleveland proclaimed all of the desired reserves on February 22, 1897—the one hundred and sixty-fifth anniversary of Washington's birthday. Immediately a storm broke loose in the Senate.

PREVIOUS HOSTILITY TOWARD THE RESERVES

The efforts above mentioned, seeking better protection for the forest reserves, were not the only sort of activity in Congress. It is true that many of these reserves were established upon the petition of citizens residing in the respective states,[24] but there was much opposition to the reserves from the very first, and in almost every session of Congress war was waged on the reservation policy. In 1892, Representative Otis of Kansas introduced a bill to open the Yosemite and and General Grant parks in California.[25] Bowers of California was always hostile to the reserves in that state, and in 1896 he secured a favorable committee report on one of his "settlers' relief" bills.[26] In the second session of the fifty-fourth Congress, several bills were introduced to abolish the forest reserves.

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[21] S. Doc. 21; 55 Cong. 1 sess.

[22] *Stat.* 29, 432.

[23] S. Doc. 105; 55 Cong. 1 sess.: *Science*, 5, 489, 893. Fernow thinks that this "junket" was unnecessary and unprofitable. (Fernow, "History of Forestry," 417.)

Two classes in the West were particularly hostile—the stockmen, who found their privileges restricted by the reservation of these lands, and the miners, who were at first entirely shut out of all forest reserves.[27]

The prohibition of mining was an unnecessary hardship, for mining, properly conducted, would not have interfered seriously with the purposes for which the reserves were created, and in 1896, certain reservations in Colorado were opened to miners.[28] In discussing the Colorado bill, McRae pointed out the need of general rather than special legislation on the subject, and the day after Cleveland created the thirteen reserves, Secretary of the Interior David R. Francis requested the chairman of the Senate Committee on Appropriations to insert into the Sundry Civil Bill a provision opening all forest reserves to mining.[29] Such a provision was inserted in a later Sundry Civil Bill, but, as will be seen, with one or two other provisions which Secretary Francis had not called for.

THE ATTACK OF 1897

The western hostility previous to the year 1897 having been noted, the effect of Cleveland's proclamations of February 22 can be better understood. The reserves were necessarily proclaimed without a very careful investigation of local interests,[30] and there was real cause for resentment in some sections, especially since the reservation of the lands did not accomplish anything toward their protection. Remonstrances poured into Congress. On February 28, Senator Allen of Nebraska presented a memorial from the Nebraska state senate, asking Congress to annul one of Cleveland's proclamations.[31] The next day, Carter of Montana presented a resolution from the legislature of Wyoming, praying for the abolition of one of the new reserves in that state, "lest it seriously cripple and retard the state's development."[32] The Seattle Chamber of Commerce,[33] and various other commercial associations in the West sent petitions and remonstrances.

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[24] Fernow, "History of Forestry," 417.

[25] H. R. 8445; 52 Cong. 1 sess.

[26] H. Report 1814; 54 Cong. 1 sess.

[27] *Proceedings*, Am. Forestry Assoc., 1894-95-96, 71.

[28] *Stat.* 29, 11. It is true that under the mineral land laws speculators later acquired some timber lands within the reserves, and tried to acquire a great deal more. (*Forestry and Irrigation*, Oct., 1906, 449; Apr., 1908, 189.)

[29] *Cong. Rec.*, Jan. 30, 1896, 1126: S. Doc. 21; 55 Cong. 1 sess.

A determined effort was made by Senator Mantle of Montana, Clark of Wyoming, and other western men, during the closing days of Cleveland's administration, to secure the revocation of these proclamations by means of a rider to the Sundry Civil Bill. Senator Clark offered the amendment. "We have protested by this amendment," he announced, "against a most grievous wrong that I am convinced was perpetrated in ignorance and since that time has been continued by obstinacy, because, the facts and circumstances being once known as to these reservations, nothing but pure obstinacy would persist in a course that threatens so much disaster to a large portion of this Republic."

Clark's amendment was accepted by the Senate, but when it came up in the House, Lacey of Iowa offered as a substitute an amendment giving the President authority to modify or vacate altogether any executive order creating forest reserves. After some debate, the House agreed to this substitute. When it came to the Senate, considerable hostility was evident, but Clark and his supporters finally abandoned their attempt to revoke the proclamations during that session of Congress. They announced, however, that they would block legislation in the next session until they got relief. "I want to say here and now," declared Mantle, "that if these assurances (of modification of the proclamations) should fail of realization, if the people of those states should be subjected to the loss and the hardship and the privation which must necessarily follow the continuation of that order, whenever Congress meets in extra session, so far as I am personally concerned, so far as under the rules, the very liberal rules of this body, I am able to prevent it, I shall do my utmost to prevent any important legislation from being crystallized into law until this gross injustice to the people of these states has been remedied and righted."[34]

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[30] Fernow, "History of Forestry," 418. See also S. Doc. 68; 55 Cong. 1 sess.

[31] *Cong. Rec.*, Feb. 28, 1897, 2480.

[32] *Cong. Rec.*, Mar. 1, 1897, 2548.

[33] S. Doc. 68; 55 Cong. 1 sess.

President Cleveland did not approve of the Lacey amendment, and pocket-vetoed the Sundry Civil Bill; so the western men secured no relief during his administration, and the question of revoking or suspending the new reserves was for a while a burning issue in certain political circles.

In the meantime, Charles D. Walcott of the *Geological Survey*, seeing that the forest reserves were in danger, went to Senator Pettigrew and convinced him that there was an opportunity to do a great service for the country by securing the passage of legislation for the protection and administration of the reserves. Walcott drew up a bill, using the McRae bill (H. R. 119) as a basis, and after talking it over with Secretary Bliss of the Department of the Interior, with the forestry commission of the National Academy of Sciences, and even with President McKinley and his cabinet, asked Pettigrew to introduce it as an amendment to the Sundry Civil Bill.

A special session of Congress was called by President McKinley on March 15, 1897, and early in the session, Pettigrew came forward with his amendment[35]—a slightly different measure from the one Walcott had given him.[36] This amendment has played so important a part in the history of the forest reserves, that its provisions must be noted in detail.

Among the concessions to the opponents of the reserves, was, first, a clause providing that reserves might be set aside only for certain specified purposes—"to improve or protect the forest," or "for the purpose of securing favorable conditions of water flows, and to furnish a continuous supply of timber for the use and necessities of citizens of the United States." The inclusion of lands more valuable for minerals or for agricultural purposes than for forest purposes was specifically forbidden. In the second place, the Secretary of the Interior was authorized to give free timber and stone to settlers, miners, or residents for firewood, fencing, building, mining, prospecting, and other domestic purposes; and in the third place, the reserves were opened to mining and prospecting. In the fourth place, a clause authorized any person who had a claim or a patent to land included in a forest reserve to relinquish his tract to the government and select and receive patent to an equal area outside.

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[34] H. R. 10356; 54 Cong. 2 sess.: *Cong. Rec.*, Mar. 3, 1897, 2930.

[35] *Cong. Rec.*, Apr. 8, 1897, 655; May 5, 899.

[36] The writer is obliged to Dr. Charles Walcott for much of this information.

A number of provisions of the Pettigrew bill showed the influence of wise and far-sighted friends of the reserves. In the first place, and most important, a clause gave the Secretary of the Interior the power to make provisions for the protection of the reserve—to "make such rules and regulations and establish such service as will insure the objects of such reservations, namely, to regulate their occupancy and use, and to preserve the forests thereon from destruction." In the second place, the secretary was authorized to sell timber, "under such rules and regulations" as he might prescribe; and in the third place, the President was authorized to restore lands found better adapted to mining or agricultural purposes than to forest usage, or to modify the boundaries of forest reserves in any way.

On the whole, the amendment was about the best measure that friends of the reserves could have hoped for, but as a rider to an appropriation bill it was clearly out of order. Pettigrew announced, however, that if his amendment were ruled out on a point of order, he would fight the appropriation bill with a filibuster. This proved unnecessary, for when Senator Gorman raised the point of order it was referred to the Senate and voted down by a vote of 25 to 23.[37]

In the amendment, as first introduced by Pettigrew, there was no provision revoking or suspending the new reserves; but he later reintroduced it with a clause suspending the reserves that Cleveland had established, until March 1, 1898; and it was on this question of suspending the reserves that most of the debates turned, less attention being paid to other more important provisions.

The western men rallied around Pettigrew, almost to a man. Clark of Wyoming complained of the "utter and absolute and intolerant ignorance of the whole proposition." White of California declared that the proclamations were "improvidently made," "ridiculous in the extreme, oppressive," and indicative of a "dense ignorance of the actualities of the situation." Turner of Washington called the proclamations "an outrage on the interests and the rights and the feelings of the people of the states that are affected by it." "I say the Senators from those states are not to be made to kick their shins around the lobbies of the executive department or around the lobbies of the Interior Department," he proclaimed. "The self-respecting course for the Senators of those States to pursue is to come to the legislative branch of the Government and ask that branch of the Government to correct the evils which have been inflicted upon them by executive action."[38]

Rawlins of Utah declared that Cleveland's action was "as gross an outrage almost as was committed by William the Conqueror, who, for the purpose of making a hunting reserve, drove out and destroyed the means of livelihood of hundreds of thousands of people." "Whence come the objections to the enactment of this measure of fairness and justice?" he asked. "They come from some senator away off in Massachusetts. . . . The speech of the Senator from Delaware [Gray] is

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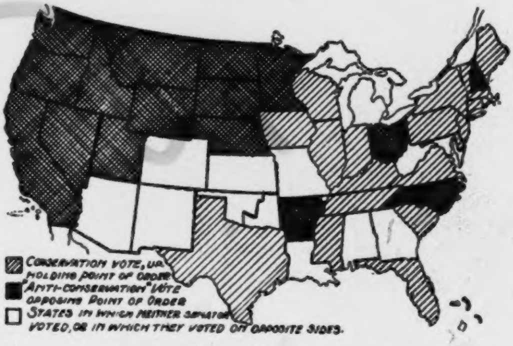
VOTE ON SENATOR GORMAN'S POINT OF ORDER


▨ CONSERVATION VOTE, UPHOLDING POINT OF ORDER
■ "ANTI-CONSERVATION" VOTE OPPOSING POINT OF ORDER
☐ STATES IN WHICH NEITHER SENATOR VOTED, OR IN WHICH THEY VOTED ON OPPOSITE SIDES.

Cong. Rec., May 6, 1897, 924

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[38] *Cong. Rec.*, May 5, 1897, 901; May 6, 909, 912, 914, 916.

to the effect that he has great concern for the preservation of the forests of the distant state of Washington 5000 miles from the place where he lives. Yet neither he nor the people who may live in the State where he now resides can by any conceivable possibility be affected one way or the other by this legislation. It is a high tribute which the gentlemen of the East pay to the intelligence, the sense of fairness, the foresight of the people in the West and the men whom the people of that section have sent to represent them in the Halls of Congress, that there should be any quibble raised in respect to the enactment of this legislation."

Wilson of Washington appealed to history to show that a great injustice was being done to the West. "It would seem," he argued, "that it was impossible for the people west of the Missouri River to develop their own domain and their own country in their own way. We have never had that opportunity. The people who first settled in New England came and took thousands of acres of land and developed them as they saw fit, and the people who passed from New England across the Alleghany Mountains and settled in the Mississippi Valley took up their lands at a dollar and a quarter an acre without those restrictions required under the homestead act of 1860. . . . Our people have had to go forward and develop their country by law, and they have observed the law in so far as it has been possible for any citizen to do so. They do not complain of this. It is right and proper and just. What they do complain of is that their material interests—those very things that affect their prosperity and advancement, nay, their very existence as Commonwealths—shall be disposed of by the stroke of pen, as though we were mere provinces and not sovereign States of this great Union." Wilson spoke bitterly of the "eastern friends, who are so extremely solicitous for our happiness and our prosperity, and our growth and development, who control our incomings and our outgoings with such a delightful liberality upon their part." "Why," he asked, referring to the commission of the National Academy of Sciences, "should we be everlastingly and eternally harassed and annoyed and bedeviled by these scientific gentlemen from Harvard College?"

Like almost all men from the West, Wilson was very anxious that nothing be done to interfere with the development of the West. "We in the western country do not desire to do anything that is not proper, that is not right," he announced. "We only ask for equal and exact justice; we only ask to help develop the Union of the States. . . . Suppose these forest reservations had been made years ago, and that these withdrawals had been made in California, would the $1,500,000,000 of gold have been produced in that state? . . . If such withdrawal had been made in Idaho, would she have contributed her $200,000,000 of gold and silver to our national wealth? . . . Had the mountainous regions of Montana been withdrawn, would she have given us her $35,000,000 yearly of the precious metals? A wonderful development has been made, a wonderful growth has come about. It was not done by silver; it was not done by gold; it was not accomplished by paper money; but it was accomplished by the energy, the industry, the perseverance, the trials, the self-denials of the hardy pioneers who have blazed the pathway of civilization into a magnificent highway and built upon the other side of the Rocky Mountains an empire for you and for me."

The conservation forces made no very spirited contest, because even the eastern men felt that Cleveland's proclamations had caused considerable hardship, and that there was much justice in the western demand for relief. Even staunch conservationists were willing that some relief should be provided, but they were not willing to let the attacks upon the general policy of forest reservation go unchallenged; and Allison of Iowa, Gorman of Maryland, Hawley of Connecticut, and Gray of Delaware took up the defense with some energy. Gray announced that while he was willing to make concessions, he still supported the reservation policy. "All I want," he said, "is that the Senate should not consider that we have abandoned this great question of forest preservation in the interest of the whole people of the United States to the selfish interests of speculators and owners—and I say it in no invidious sense—who have rushed into that country, and of course will naturally sacrifice larger interests to the particular interest they have in hand. . . . I do not blame them, but they need the regulating hand of law. I do not blame a man who goes into that country and finds he has a large fortune in view, if he sacrifices large interests in the future to present advantage, that he may gain by his conduct. It is not human nature that he will, unless the strong hand of administrative law restrains him and compels him, subordinate his private interests to the larger interests of the whole people."

The adoption of Pettigrew's amendment in the Senate by a vote of 14 to 32 shows how strong was the sentiment in its favor.[39] The fact that many western men should be energetically pushing a measure which was later to be recognized as one of the great landmarks in the conservation movement, paradoxical as it seems at first blush, is not difficult to explain. A great many forest reserves had been established in the West, and these lands were virtually locked up against all use or development; and at the same time they were just as completely unprotected from fire and trespass as unreserved lands. Pettigrew's amendment, opening these lands to mining, and providing for the use and development, as well as the protection, of the timber, naturally appealed to the men from the states involved; while the lieu selection provision, in its very generous treatment of settlers, presented a strong argument for western support.

In the House, several western men took up with energy the cause which Pettigrew had espoused in the Senate. Their activity took the form in the main of a bitter denunciation of Cleveland's proclamation of February 22. Hartman of Montana called it "a parting shot of the worst enemy that the American people have ever had." Knowles of South Dakota declared that the issue of this "villainous order" meant that 15,000 people in his state "must vacate their homes and become paupers"; and he was particularly indignant because President Cleveland had consulted so little the wishes of the western politicians. "We know the 'rotten boroughs of the West,' as the New York *World* calls us, have little influence with this administration," he said. "Our Representatives warm their heels in the anterooms not only of the President, but those of the heads of Departments, while the Representatives and Senators from the East file past them and have the quick ear of every branch of the Government." Castle of California declared that "there was never exhibited by any government a more shameless, a more brutal object lesson of might making right" than in the treatment of certain "peaceable citizens of California"; and Bailey of Texas declared he would never "vote to make any adjustment which proposes in a foolish and sentimental regard for forests to ignore and disregard the interests of the men of flesh and blood who have built up that country."[40]

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[39] *Cong. Rec.*, May 6, 1897, 924.

The complaints of the western men did not elicit a large measure of sympathy in the House. Lacey of Iowa saw one aspect of the situation very clearly. "I am not surprised," he pointedly remarked, "to find a great deal of hostility to this order, coming in general from a source not very far from the headquarters of some of the great mines of the country, which have been getting timber free of charge under permits from the Interior Department. . . . I have examined permits giving to certain mines in South Dakota—to certain mine operators there; not silver miners, either, but gold bugs—the privilege of cutting four square miles of timber in a single permit absolutely free of charge. In connection with the same mines, I have seen railroads which have been built right through that timber, and upon those railway trains almost mountains of timber are carried and dumped at the foot of the mine, free of charge so far as the Government is concerned. No wonder gentlemen complain of the loss or curtailment of such a privilege as this. Nothing is so sacred as an abuse."[41]

McRae of Arkansas likewise showed how the miners were receiving free timber under more liberal terms than ever before, yet were not content to exploit the timber on the public domain, but wanted to invade also the reserves. "I appeal to you," he said in closing his argument, "in behalf of the millions of people along our rivers, for protection. I appeal to you in behalf of the health and prosperity of the people of the West to protect them. I appeal to you in behalf of the arid region, where there are neither trees nor water, to protect them. Save our forest reservations and prevent the floods upon the mighty Mississippi." Lacey and McRae received some help in their opposition, even from the West, for Bell of Colorado defended the reservation policy because it conserved the water supply for the valleys below. Underwood of Alabama favored an amendment giving the President power to change any of the reservations, instead of Congress doing it, on the grounds that the President could act more quickly and more intelligently than Congress. Cannon also favored this idea, but it never came to a vote, and the debate was finally cut off by Lacey's motion for non-concurrence, which was adopted by a vote of 100 to 39.[42]

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[40] *Cong. Rec.*, May 10, 969, 970; May 11, 1007, 1008, 1013.

[41] *Ibid.*, May 10, 965.

The conference committee to which the Sundry Civil Bill was referred was fortunately composed mainly of men who were not hostile to the reserves. At least two of the Senate conferees—Allison of Iowa and Gorman of Maryland—had actively defended the forest reserves, while, of the House conferees, only one—Sayers of Texas—had anything of the western bias. Representative Stone of Pennsylvania had never taken an active interest in the forestry question, and Cannon, although not a conservationist, opposed legislation in this fashion, on an appropriation bill. There was not an aggressive enemy of conservation on the committee.

The conference report changed only one important clause of the Pettigrew amendment—that relating to lieu selections by settlers in the forest reserves. This clause later became so important that it must be examined carefully.[43]

THE FOREST LIEU SECTION

Pettigrew's amendment, as originally introduced, provided as follows: "Any person who may have initiated or acquired any lawful claim or right to land within any forest reservation," might relinquish the land to the United States, and in lieu thereof "select and *have patented* to him, free of charge, a tract of land of like area wheresoever there are public lands open for settlement." This was an exceedingly generous provision, for it would have allowed any settler who had "initiated" a claim, no matter how far he had gone with it, no matter whether he had ever lived on it at all or not, to relinquish and have "patented" to him an equal area anywhere that there were "public lands open to settlement." This provision would have permitted any speculator to file claims or make entry on any land that he thought likely to be included in a forest reserve, and then, if the reserve were established, trade his claim off for a patent elsewhere.

As soon as the Pettigrew amendment came up in the House, Lacey objected to the lieu selection clause and offered as a substitute a clause giving "any settler or owner" of "an unperfected bona fide claim or patent" included in a forest reserve the right to relinquish and select in lieu thereof "a tract of vacant land open to settlement," free of charge, and allowed credit on the new claim for any time spent on the relinquished claim. This substitute was taken from the McRae bill, which had been before Congress for some time; and it differed in two important respects from the clause in Pettigrew's amendment. In the first place, instead of giving the settler a *patent* to his lieu selection, it gave him only the same claim, right, or title as he had in the forest reserve before, and in the second place, it allowed lieu selections, not only to "persons," but also to "*owners*" generally.[44]

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[42] *Cong. Rec.*, May 10, 966, 969, 1016, 1013.

[43] *Cong. Rec.*, June 17, 1913, 2059.

The report of the conference committee to which the bill was referred followed the provisions of the Lacey substitute, and this caused many of the western men to oppose the adoption of the report, although in all other important respects the Pettigrew amendment had been adopted without alteration. In the Senate, White of California, Cannon of Utah, and Shoup of Idaho were strongly opposed to the conference report; and Rawlins of Utah offered several amendments before he was reminded that amendments to a conference report were out of order. Pettigrew announced that he felt it his duty to insist upon the absolute revocation of the proclamation of February 22, even if it involved the defeat of the Sundry Civil Bill. Thus it appears that the lieu selection clause was very important to him, for in his amendment as originally presented he had not called for revocation at all; and the conference report followed his own ideas except

[44] Some of the changes made in this amendment during its passage through Congress throw a rather interesting light on the "manners and customs" of politicians. The amendment Walcott prepared and gave to Pettigrew contained a provision that the "settlers" "miners," "residents," and "prospectors" mentioned as entitled to free timber, should include only individual settlers and not corporations. Before introducing it, however, Pettigrew consulted ex-Senator Moody of South Dakota, counsel for the Homestead Mining Company, and Moody eliminated this provision to "improve its phraseology." He also erased the provision giving the Secretary of the Interior power to establish rules and regulations for giving free timber. When Walcott saw what had happened to his amendment, he immediately called upon Pettigrew; and Pettigrew promised to reintroduce the unaltered amendment. This he did on April 8, and it was referred to a committee for consideration. On May 5, Pettigrew submitted the amendment in the Senate again, but again the clause limiting free timber to individual settlers was omitted, and another clause, suspending the new reserves, had been added. Both these changes appeared in the bill as finally passed.

in the matter of lieu selections. The opposition did not have strong enough support, even in the Senate, however, to block an appropriation bill; and the conference report was adopted by a vote of 32 to 25 in the Senate, and 89 to 6 in the House. With the approval of this act, on June 4, 1897, the forest reserves emerged from a very precarious situation.[45]

Sundry Civil Appropriation

THE ACT OF 1897

The act of 1897 was thus a compromise. The western men secured, in the first place, the suspension of Cleveland's proclamation. At the end of nine months the proclamations were again to take effect, but this allowed sufficient time for speculators and adventurers to go upon the land and establish claims against the government, and enabled mining companies to cut supplies of timber.[46] The clause limiting the purposes for which reserves might be set aside was not a serious restriction, however; the provision authorizing the Secretary of the Interior to give free timber to settlers was one which he might use at his own discretion; and the clause opening the reserves to mining was not likely to injure the reserves at all, while it was certain to greatly reduce western hostility to the reserves.

On the whole, the act represents a very important step forward. The permission given the secretary to sell timber growing on the reserves recognized at last, and forty years too late, the principle which must govern any intelligent system of forest administration—sale of the timber with a reservation of the land. It is true that merely authorizing the Secretary of the Interior to "make provisions for the protection of the reserves" did not afford much protection unless the secretary had funds, and appropriations for protection from timber trespass had even decreased since 1891;[47] but under the vigorous administration of Pinchot these appropriations were destined to increase again.[48] Finally, the provision authorizing the President to restore agricultural lands and modify the boundaries [illegible] reserves in any way made it possible for him to avoid stirring up [illegible] much local antagonism.[49] Incidentally, the discussion aroused by Cleveland's proclamations, bitter as it was, awakened a public interest in forest questions which was very favorable to the future development of the forest policy.

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[45] *Cong. Rec.*, May 27, 1897, 1278 et seq., 1284, 1285: S. Doc. 68; 55 Cong. 1 sess.

[46] *Atlantic Monthly*, Vol. 80, 268.

[47] In 1891, the amount appropriated had been $100,000 for "timber protection," and $120,000 for "protection from fraudulent entry," making $220,000 in all. In 1897, these two items were combined and a total of only $90,000 was appropriated. (*Stat.* 26, 970; 30, 32.)

[48] Even had there been no increase in appropriations, the secretary was now in a better position than ever before to fight the worst kind of depredations, for in

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February, 1897, Congress passed an act providing a heavy penalty for setting fires on the public domain. (*Stat.* 29, 594.)

[49] Intelligent administration of these provisions was made easier by an appropriation of $150,000 for the survey of the reserves. Fernow, however, suggests that this appropriation was secured, not mainly because of the need of surveys, but rather because a certain organized survey party in the Geological Survey was then in need of employment. (*Stat.* 30, 34: Fernow, "History of Forestry," 419.)

CHAPTER IV

THE FOREST RESERVES SINCE 1897: THE PERIOD OF CONSERVATION ACTIVITY

THE "GOLDEN ERA" OF FOREST CONSERVATION ACTIVITY

The decade following the passage of the act of 1897 may be regarded as the "golden era" of the conservation movement, for more was accomplished during this decade than during any similar period in the history of that movement.

In 1897, there were less than ten professional foresters in the country, no field equipment, no real understanding of forestry anywhere, except with a few men like Fernow and Pinchot. The Division of Forestry was still merely a bureau of information, employing a total of thirteen persons, including five clerks and one messenger. In 1898, however, Gifford Pinchot was appointed Chief of the Division of Forestry, and under his administration the development of forestry work was almost phenomenal. Pinchot was young, ambitious, trained in the best forest schools of Europe, with a large fortune, and a driving zeal for public service, coupled with a winning personality, great power of leadership and organization—a "millionaire with a mission." Fortunately he was working under a man who was able to appreciate those qualities; and President Roosevelt probably sought the counsel of Pinchot more than that of any other man in Washington. These two men represented a force which was able to accomplish great things for conservation.[1]

PUBLIC OPINION AND CONSERVATION

Public interest in forest conservation developed very rapidly during this period, largely because of the influence of Pinchot and Roosevelt.

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[1] Fernow, "History of Forestry," 420: *Report*, Sec. of Agr., 1912, 229-243; *Proceedings*, Society of Am. Foresters, May, 1905: *American Magazine*, Jan., 1908: *Current Literature*, 47, 388: *Independent*, 64, 415, 1374: *No. Am. Rev.*, 188, 740: *Outlook*, 87, 291, 292; 92, 718; 93, 770; 94, 282: *World's Work*, 16, 10235, 10427; 19, 12662; 20, 12871.

This increase in public interest is clearly see[illegible]ly in many journals and periodicals of the time, but in t[illegible]ess made by various states in forest matters, and in the for[illegible] of a number of conservation commissions—state, inter-state, and national.

STATE CONSERVATION ACTIVITY

The interest shown by many of the states previous to 1891 has already been noted.[2] In the period following that date, this state activity increased greatly. In New York, where state forests had first been provided for, a law was passed in 1897, authorizing the purchase of additional forest lands, and a special agency, the Forest Reserve Board, was established to carry this into execution.[3] Under this law about $3,500,000 has been spent, and in 1907 over 1,500,000 acres had been added to the State Forest Reserve.[4] In 1900, Minnesota enacted a law providing for state forest reserves. In 1902, Massachusetts acquired three state parks and placed a trained forester in charge. The next year, Indiana appropriated to buy a small state reservation, and in 1906, Maryland had four small reservations, gifts from private individuals.

Pennsylvania was one of the first states to undertake the purchase of public forests. As a result of a persistent propaganda by the Pennsylvania Forestry Association, a commission of inquiry was instituted in 1887, and another in 1893. The legislature in 1895 provided for a Commissioner of Forestry, and two years later passed an act providing for the purchase of state forest reservations. In 1908, nearly a million acres had been bought up under this law, and the state was fast working out a system of efficient management.[5]

Wisconsin provided in 1897 for a forestry commission to draw up a plan for the protection and utilization of the forest resources of the state, and in 1905, the legislature passed a law setting aside all state lands in the northern timbered portion of the state. Wisconsin now has nearly 400,000 acres of state forest lands. In 1900, Minnesota entered upon a policy of forest reservation, and established a state forest service a decade later. Michigan passed a law in 1907 withdrawing from sale 40,000 acres of agricultural college lands, and the state now owns over 200,000 acres of state forests. In 1908, Vermont made state forests possible by creating a Board of Agriculture and Forestry, with authority to purchase lands for the state; and Vermont now has a small area of state forest land. New Hampshire recently provided for the purchase of Crawford Notch. New Jersey now has about 14,000 acres of state forest lands, and Connecticut a smaller amount, while South Dakota has 80,000 acres, carrying 250,000,000 feet of western yellow pine. Several American cities have even established forests, usually for watershed protection. Salt Lake City has about 25,000 acres, Newark, New Jersey, over 22,000 acres, and Asheville, North Carolina, Hartford, Connecticut, and Lynchburg, Virginia, have smaller amounts.[6]

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[2] Cross Reference, pp. 33, 34, 96, 97.

[3] Fernow, "History of Forestry," 426.

[4] In 1894, a constitutional convention of New York adopted an article forever prohibiting the cutting of trees on state lands, and the people ratified this action. This has of course prevented the state from using these lands in a rational, businesslike way, and renders them valuable merely as a pleasure ground for wealthy New Yorkers. (*Proceedings*, Am. Forestry Assoc., 1894-95-96, 32, 101: *Outlook*, 100, 729.)

[5] *Report*, Pa. Commissioner of Forestry, 1901-02, 11.

Comparatively few of the states own any public forests, but almost all have established some agency to look after forest matters. In some of the states, single foresters have been appointed—in Maine (1891), Connecticut (1901), Massachusetts (1904), Vermont (1904), and Rhode Island (1906).[7] Other states, following the lead of New York in 1885, have provided for commissions or boards—New Hampshire (1893), Wisconsin (1897) (a temporary commission, followed by a permanent Forestry Board in 1905), Michigan and Minnesota (1899),[8] Indiana (1901), New Jersey (1905), Washington (1905), Maryland and Kentucky (1906), Alabama and Oregon (1907). Hawaii created a Bureau of Agriculture and Forestry in 1902, and in 1903, a Board of Commissioners of Agriculture and Forestry. In 1905, the California Board of Forestry, which had been abolished by politics in 1893, was again revived.[9] Many of the appointments in these various state commissions went to politicians at first, but gradually that class of appointees is being superseded by men with special training for the work.

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[6] *Proceedings*, Society of Am. Foresters; July, 1913, 202: *Forestry and Irrigation*, Feb., 1906, 80; Aug., 1907, 403: *American Forestry*, May, 1911, 253; Jan., 1912, 62; May, 1917, 306: *Smithsonian Report*, 1910, 433: *Am. Lumberman*, Oct. 7, 1916, 28.

[7] Fernow, "History of Forestry," 428: Kinney, "Forest Law in America."

[8] The office of fire warden had been created in Minnesota in 1895.

[9] Information regarding these commissions has been taken from the annual

The subject of state legislation regarding forestry is too large to be treated here, but it is interesting to note that the idea expressed in the old Timber Culture Act of the seventies had not yet been abandoned, for several states passed timber culture acts after 1891, Wisconsin providing, as late as 1907,[10] for a tax exemption of lands planted in trees. Even as late as 1917, several states still have laws in effect permitting county boards of commissioners to offer bounties; several others offer tax rebates, and still others exempt young trees from taxation for a period of years. Indiana passed a law in 1899 allowing partial tax exemption, but it was declared unconstitutional. In recent years, the timber culture movement has developed into a movement for rational taxation of forest lands, and on this problem many of the states are still at work.[11]

An increasing interest in forestry is indicated by the growing number of states which provide for the observance of Arbor Day. Several states had provided for this previous to 1891, and many others fol-

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reports of the various commissions, from the *Proceedings* of the American Forestry Congress, the *Proceedings* of the Society of American Foresters, and of the American Forestry Association, from Fernow's "History of Forestry," 425-435, and from Kinney, "Forest Law in America."

[10] *Report,* State Forester, Wisconsin, 1907-08, 92.

[11] House Report 134 of Mass., Jan., 1906: Mass., Report of Commission on Taxation of Wild or Forest Lands, Senate No. 426, Jan., 1914: Mass. Acts of 1914, Chapter 598: "Taxation of Forest Lands in Wisconsin"; Report of State Board of Forestry, Sept., 1910: *Report,* Wis. State Forester, 1907-08, 93-95: Conn., *Report,* Special Commission on Taxation of Woodland, 1912: *Third Ann. Report,* N. Hampshire State Tax Commission: Washington, *Report,* State Board of Tax Commissioners, 1912: *Report,* Commissioner of Corporations on Taxation, Dec., 1913, 16, 17, 25, 46, 47, 62, 112, 241, 280, 329, 364: *Report,* National Conservation Commission, 1909, Vol. II, 581-632: *Proceedings,* Am. Forestry Assoc., 1891-92-93, 22, 23, 74, 75: Fifth National Conservation Congress, Report on Forest Taxation: *Report,* Committee of National Tax Assoc. on Forest Taxation, by Fred R. Fairchild (Reprinted from Proceedings of Nat'l Tax Assoc., Vol. VII): "Forest Taxation," by Fred R. Fairchild, Address delivered before Sixth National Conference on State and Local Taxation, Des Moines, Iowa; Sept. 4, 1912: Fernow, "Economics of Forestry," Appendix, 465-467: *American Lumberman,* Jan. 27, 1912: *Proceedings,* Society of Am. Foresters, Apr., 1906, 115: Addresses by Fred R. Fairchild, A. C. Shaw, and B. E. Fernow at International Conference on State and Local Taxation, Toronto, Canada, Oct. 6-9, 1908; International Tax Assoc., Columbus, Ohio.

lowed after that time. As early as 1892, the American Educational Association recommended the universal observance of Arbor Day, and at the present time there are only a very few states where the day is not recognized. On April 15, 1907, President Roosevelt called upon the school children of the United States to give one day each year to tree-planting exercises. The movement has even spread to foreign countries.[12]

It should perhaps be noted that in recent years many of the states have given increasing attention to fire protection. After the destructive fires in the Northeast in 1908, Maine increased her annual appropriation for fire protection to nearly $70,000; New Hampshire to $20,000; Massachusetts set aside $25,000; Connecticut $5000; New York $75,000; Pennsylvania $25,000; and Maryland $5000. Likewise, after the terrible forest fires of 1910, in the Lake states and in the Pacific Northwest, Wisconsin raised her appropriation to $35,000; Minnesota appropriated $75,000; Washington $38,000; and Oregon $25,000.[13] In 1907, the first Lake States Forestry Conference, composed of representatives from Michigan, Minnesota, and Wisconsin, was held at Saginaw, Michigan; and in December, 1910, after the disastrous fires of the summer of that year, the Lake States Forest Fire Conference met at St. Paul, Minnesota.[14] In 1911, the Boy Scouts organized in Michigan for protection against forest fires.

EDUCATION IN FORESTRY

Some provision for technical education in forestry was made long before opportunity for its application had arisen, and indeed before any professional foresters could be found in this country to do the teaching. The new subject attracted the attention of educational institutions, and the desire to assist in a popular movement led to its introduction, at least by name, into their curricula. In 1897, twenty institutions, land grant colleges, offered some instruction in forestry.

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[12] *Proceedings*, Am. Forestry Assoc., 1891-92-93, 12: *Arbor and Bird Day Annual*, Indiana, 1907, 15: *Forestry and Irrigation*, May, 1907, 223, 247, 265; Apr., 1908, 201.

[13] *American Forestry*, Nov., 1913, 721.

[14] Official Report of the Conference, published by the *American Lumberman*, Chicago, 1911.

The era of professional forest schools, however, was inaugurate in 1898, when the New York State College of Forestry was organize at Cornell University, and when the private school at Biltmore wa opened by Dr. Schenck, on the estate of W. K. Vanderbilt. A yea later, another forest school was opened at Yale University, an endowment of the Pinchots. In 1903, the University of Michigan added professional department of forestry; and then followed a real floo of educational enthusiasm, one institution after another addin courses in forestry.[15]

FORESTRY JOURNALS AND FORESTRY SOCIETIES

Two new forestry journals appeared: the *Forestry Quarterl* launched in 1902 by Dr. Fernow, and the *New Jersey Foreste* started by Dr. John Gifford in 1895. The latter publication soo changed its name to *The Forester,* and three years later was take over by the American Forestry Association, continued as *Forestr and Irrigation,* later as *Conservation,* and still later as *America Forestry.*[16]

In 1901, the Society for the Protection of New Hampshire Forest was organized, and this society exerted a considerable influence i New England during the following years. In the same year, th Canadian Forestry Association held its first annual meeting i Ottawa. During the next decade, a number of associations wer formed: the Iowa Park and Forest Association, the Nebraska Conservation and State Development Congress, the Paducah (Kentucky Forest Association, the Southern Conservation Congress; and othe forestry associations in Maine, West Virginia, North Carolin Georgia, and Louisiana. In 1908, the National Conservation Leagu was organized, with Walter L. Fisher as president, Theodore Roosevelt as honorary president, and William Taft and W. J. Bryan a honorary vice-presidents. In the same year, the Woman's Nation Rivers and Harbors Congress was organized in Shreveport, Louisiana, one of the objects being the conservation of forests; and th following year, the National Conservation Association was organize w[illegible] Charles W. Eliot as president. In 1909, a conservation com[illegible]ion was also created in Canada.[17]

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[15] Fernow, "History of Forestry," 433.

[16] *Ibid.,* 432.

OTHER INDICATIONS OF CONSERVATION SENTIMENT

The railroad companies began experiments in tree planting in the early seventies, and some of them are still trying to work out a system of timber culture which will at least provide a part of the future tie supply. The Louisville & Nashville, the Michigan Central, the Illinois Central, the Big Four, the St. Louis & San Francisco, and the Norfolk & Western have made various sporadic attempts to develop plantations. The Santa Fé has made systematic efforts to grow eucalyptus on some of its lands in southern California; and the Pennsylvania Railroad has planted several million trees on its unused land.[18]

Nowhere was the interest of the people in timber conservation more clearly indicated than in the party platforms of 1908 and 1912. The Democratic platform adopted at Denver in 1908 announced, "We insist upon the preservation, protection and replacement of needed forests." The Republican platform of the same year stated, "We endorse the movement inaugurated by the administration for the conservation of natural resources, and we approve of all measures to prevent the waste of timber." Four years later the Republican, Democratic, Progressive, and Prohibition platforms all had conservation planks, the Progressive platform being particularly comprehensive in that respect.[19]

BROADENING SCOPE OF THE CONSERVATION MOVEMENT

It was during the first decade of the twentieth century that the "conservation movement" acquired something of its present significance and importance. Under the influence of Pinchot largely, the idea of conservation was extended to other natural resources than timber—coal, oil, gas, iron, grazing lands, irrigable lands, water and water power, and at the same time acquired a broader meaning than that involved in the mere "saving" of these resources. With Pinchot

[17] Information here is taken from current issues of *Forestry and Irrigation, Conservation, American Forestry,* and the *Canadian Forestry Journal.*

[18] *Forest Leaves,* Aug., 1907, 50: *American Forestry,* Apr., 1910, 26: *Proceedings,* Society of Am. Foresters, Vol. 4, 30 et seq.

[19] *World Almanac and Encyclopedia,* 1910 and 1913.

and Roosevelt, the "conservation movement" meant a constru[illegible] movement, involving not only the conservation of irreplaceable [illegible] sources, but the development of other resources, as, for instance, irrigation lands, waterways and water power, not as local and private enterprises, but for the benefit of the people as a whole.

The broadening scope of the conservation movement is well indicated by the fact that the Ballinger-Pinchot controversy[20] in 1910 was mainly concerned, not with the conservation of timber, but coal. About the same time, the question of water power suddenly emerged into a position of the greatest prominence, solely due to the agitation and efforts of Pinchot. While timber conservation thus took a position of relatively less importance, it was not absolutely less important than it had been before. Probably the growing interest in coal, water power, and other resources helped, rather than retarded, the cause of forest conservation, by lending an added interest and power to the whole conservation movement. As Pinchot expressed it: "We have forestry associations, waterway associations, irrigation associations, associations of many kinds touching this problem of conservation at different points, each endeavoring to benefit the common weal along its own line, but each interested only in its own particular piece of work and unaware that it is attacking the outside, not the heart of the problem. Now the greater thing is opening out in the sight of the people. This problem of the conservation of natural resources is a single question. Each of these various bodies that have been working at different phases of it must come together on conservation as a common platform."

THE PUBLIC LANDS COMMISSION

Perhaps the real genesis of the conservation movement, in this sense, is to be found in the appointment, by President Roosevelt, of the Public Lands Commission in 1903 "to report upon the condition, operation, and effect of the present land laws, and to recommend such changes as are needed to effect the largest practicable disposition of the public lands to actual settlers, and to secure in permanence the fullest and most effective use of the resources of the public lands." The commission, composed of W. A. Richards, F. H. Newell, and

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[20] Cross Reference, pp. 201-204.

Pinchot, sat in session at Washington for several weeks, hearing testimony regarding the public lands, and then Pinchot and Newell went west to confer with various western interests. In March, 1904, a partial report was finished, and a year later the second part of the report was finished and sent to Congress. This report, like the Donaldson report of the early eighties, contained a vast amount of information regarding the public lands and the operation of the public land laws, and recommended a number of changes in those laws, in the interests of conservation. It is not certain that this report accomplished a great deal toward the repeal of bad laws or the enactment of good laws; in fact, it was somewhat disappointing as far as resulting legislation was concerned, but at any rate it furnished needed information regarding public land questions.[21]

THE WATERWAYS COMMISSION AND THE CONFERENCE OF GOVERNORS

In March, 1907, President Roosevelt created the Inland Waterways Commission, to make a comprehensive study of the river systems of the United States, and suggest means of improvement of navigation, development of power, irrigation of arid land, protection of lowlands from floods, and of uplands from soil erosion—to work out "a comprehensive plan designed for the benefit of the entire country." While this commission was engaged in an inspection trip along the lower Mississippi, Pinchot, who was a member, conceived the idea of calling a conference of the governors of the states to consider the question of the conservation of the resources of the country. President Roosevelt, of course, approved the suggestion, and wrote to the governors of all the states, inviting them to a conference to be held in the White House in May, 1908. Invitations were also extended to the justices of the Supreme Court, to members of the cabinet, to all the senators and representatives in Congress, heads of scientific bureaus at Washington, representatives of the great national societies, both scientific and industrial, representatives of journals, and to notable citizens known to be interested in the natural resources of the country, including J. J. Hill and Carnegie.

The character of this conference shows the importance which Pinchot and Roosevelt attached to the question of conservation. It was one of the most notable conventions ever held in this country, and three days were devoted to speeches on the conservation of the resources of the country.[22] Several of the governors announced that they would immediately appoint state conservation commissions in their respective states; and the number of state commissions was greatly increased within the next year or two.[23]

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[21] S. Doc. 189; 58 Cong. 3 sess.

THE NATIONAL CONSERVATION COMMISSION

Soon after the Conference of Governors, Roosevelt appointed the National Conservation Commission, with Pinchot as chairman, to make a report on the national resources of the country. The commission had no funds at its disposal, but Roosevelt gave an order directing that the heads of the scientific bureaus at Washington should utilize their forces in making investigations requested by the commission, so far as such investigations lay in their respective fields. Pinchot and his assistants did most of the work. The report of the National Conservation Commission, in three volumes, was completed in January, 1909, and is the most exhaustive inventory of our natural resources that has ever been made.[24]

Roosevelt's next step was to invite the governors of Canada and Newfoundland, and the President of Mexico, to appoint commissioners to consider with the commissioners of the United States, the question of conservation. In consequence of these invitations, the first North American Conservation Conference was held in Washington, February 18, 1909—a meeting somewhat similar to the Conference of Governors; and, at the suggestion of this conference, President Roosevelt requested the powers of the world to meet at The Hague for the purpose of considering the conservation of the natural resources of the world. Perhaps as a result of Roosevelt's activity, the Canadian Parliament made provision for a commission on conservation in May, 1909.[25]

In marked contrast to the position of President Roosevelt, was the attitude of Congress during this time. Roosevelt asked for an appropriation for the National Conservation Commission, and Senator Knute Nelson of Minnesota introduced an amendment to the Sundry Civil Bill, appropriating $25,000 for the expenses of the commission.[26] This amendment went to the Senate Committee on Appropriations and was lost there. Senator Eugene Hale of Maine was chairman of that committee, and he has been blamed for the failure of the amendment.[27]

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[22] Proceedings of a Conference of Governors, May 13-15, 1908; H. Doc. 1425; 60 Cong. 2 sess.: *Chautauquan*, 55, 21 et seq.

[23] Van Hise, "Conservation of Natural Resources in the United States," 8.

[24] S. Doc., 676; 60 Cong. 2 sess.

[25] S. Report 826; 61 Cong. 2 sess. 45: *Conservation*, Apr., 1909, 218-221: *Canadian Forestry Journal*, June, 1909, 99.

The failure of Nelson's amendment was unfortunate enough for the Conservation Commission, but it would not have been fatal had the commission still retained the authority to ask the scientific bureaus to do such work as was appropriate and proper for them to undertake. In the House of Representatives, however, a clause was attached to the Sundry Civil Bill, prohibiting all bureaus from doing work for any commission, board or similar body appointed by the President without legislative sanction.[28] James A. Tawney of Minnesota, who had generally opposed conservation, was responsible for this amendment.[29]

Congress having thus strangled the National Conservation Commission, the organization of the conservation movement was carried forward by the Joint Committee on Conservation, an official body established at the Second Conference of Governors, and in the fall of 1909, the National Conservation Association was organized. This association was supported largely by personal contributions of Pinchot.

Toward the close of the sixtieth Congress, President-elect Taft suggested to Mr. Nelson, chairman of the Committee on Public Lands, that it would be wise to provide for the appointment and maintenance of a national commission for the conservation of the natural resources of the country, but Congress did nothing. On January 14, 1910, Taft sent a special message to Congress on the subject, but it bore no fruit, as far as forests were concerned.[30] Senator Newlands introduced a bill providing for the appointment of a national conservation commission,[31] but it was never reported.

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[26] *Cong. Rec.*, Feb. 17, 1909, 2561.

[27] In earlier years, Senator Hale had evinced an apparent interest in forest conservation. (S. 1476, S. 1779; 50 Cong. 1 sess.)

[28] *Stat.* 35, 1027.

[29] *Cong. Rec.*, Feb. 25, 1909, 3118. Dr. Van Hise, president of the University of Wisconsin, wrote an article in the *World's Work*, denouncing Tawney for his anti-conservation activity; but Tawney claimed, in justification of his amendment, that Roosevelt had appointed a great number of commissions of various kinds without any sanction from Congress, and that this was turning the work of some of the bureaus into channels other than those intended by Congress. It is easy to believe that there was some truth in this, for Roosevelt was inclined to do things without specific authorization from Congress. That is about the best way for a President to get things done. (*Cong. Rec.*, July 27, 1909, 4614: *World's Work*, June, 1909, 11718, 11719.)

INCREASE IN APPROPRIATIONS FOR FORESTRY PURPOSES

Much was accomplished for conservation during this period, however, even in the enactment of legislation. In the first place, appropriations for protection against timber depredations increased very greatly. The appropriation for this purpose had been reduced somewhat between 1891 and 1897, only $90,000 being voted in the latter year, but the next year $110,000 was provided; in 1900 this was raised to $125,000, in 1902 to $150,000, and in 1904, the amount provided was $250,000; while over $240,000 additional was provided during this period in deficiency appropriations. Furthermore, a new item appeared in 1898, bearing the sum of $75,000 "for the protection and administration of the forest reserves." The next year this amount was more than doubled, and the next year nearly doubled again, while in 1904, a total of $375,000 was appropriated.[32]

The increasing appropriations for the Division of Forestry were of considerable importance, not only as showing a more generous spirit in Congress, but also in providing the knowledge upon which efficient management of the reserves must be founded. In 1897, the division received $28,520 for salaries and general expenses.[33] Two years later, the appropriation act doubled the amount given for general expenses, and broadened the purposes of the investigations to include advice to owners of woodlands as to the proper care of their timber—a very important function, which would have been considered entirely too paternalistic ten years before, and to include the finding of suitable trees for the treeless region—a clause which looks a little like a revival of the Timber Culture Law.[34] In 1900, the sum given for general expenses was again doubled, and the next year doubled again, a total of $185,000 being provided in the latter year for the *Bureau* of Forestry, which succeeded the *Division* of Forestry. In 1902, the appropriation for the Bureau of Forestry was increased over $100,000, and the next year was raised to $350,000. In 1904, $425,140 was provided, while the additional sum of $200,000 was given for a forestry and irrigation exhibit at the St. Louis World's Fair.[35]

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[30] S. Report 826; 61 Cong. 2 sess.

[31] S. 3719; 61 Cong. 2 sess.

[32] *Stat.* 30, 618, 1095; 31, 613, 614; 32, 452; 33, 482, 483.

[33] *Stat.* 30, 3, 5.

TRANSFER OF THE RESERVES TO THE DEPARTMENT OF AGRICULTURE

In connection with the appropriations for timber protection, attention must be directed to the transfer of the forest reserve administration, in 1905, from the Department of the Interior to the Department of Agriculture. This transfer did not mean simply that the appropriations went to a different department; it meant that money given for protection was more efficiently used, and it is even probable that appropriations were more generous after 1905, because of the greater efficiency in their expenditure.

Previous to 1905, the forest work of the government was badly scattered, the Land Office, in the Department of the Interior, being charged with the administration and protection of the forest reserves, the Geological Survey with the surveying, while the Division of Forestry—later the Bureau of Forestry—in the Department of Agriculture, directed the technical research and investigation. The disadvantages arising from this dispersal of functions became more and more apparent as the area of forest reserves increased. Also the Land Office was not well fitted to carry on the work of forest management, for it had no trained foresters and no facilities of developing them, or of developing the scientific knowledge upon which intelligent forest administration must be based. The Land Office attempted to do little but protect the forests against trespass and fire, although some timber was sold and the grazing of stock was regulated to some extent. This policy of merely guarding the forest reserves, without providing for their proper use—a policy of "locking up" a valuable resource—was certain to cause great hostility to the reserves, and ultimately to result in the overthrow of the reservation policy; yet it was the only policy the Land Office could well follow.

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[34] *Stat.* 30, 952.

[35] *Stat.* 31, 197, 929, 930; 32, 295, 1157; 33, 177, 286.

The necessity for some kind of a change was early recognized, and in 1901, President Roosevelt, following the recommendation of Pinchot, urged the transfer of the entire care of the reserves to the Bureau of Forestry. In response to this, Representative Lacey, chairman of the House Committee on Public Lands, introduced two bills in Congress,[36] but one of these was never reported, and the other was reported with such an incubus of amendments that its passage was not to be hoped for, or even desired.[37] A majority of the committee reporting the latter bill favored the transfer, but a few western men opposed—Mondell of Wyoming, Jones of Washington, and Shafroth of Colorado, and also Fordney of Michigan. These men, in their minority report, advanced a number of reasons for their opposition, and some of the reasons were logical and valid enough; but they did not mention one consideration which doubtless had a great deal of weight with some of the western men—the fact that the Department of Agriculture was known to favor considerable restriction on grazing in the forest reserves.[38]

Opposition to the Lacey bill did not come entirely from the West, however, and, in the debates, the most violent hostility, not only to this particular bill, but to the Bureau of Forestry and its investigations generally, was shown by "Uncle Joe" Cannon of Illinois. Cannon was a conservative of the old school, and very hostile to Pinchot and his work, perhaps recognizing in Pinchot a menace to some of the interests which he himself had always guarded zealously in Congress. Cannon was always very suspicious of the "college professors, students, wise men and so on and so on throughout the length and breadth of the country, who investigate," and it was his motion to strike out the enacting clause that finally cut the bill off "right close up behind the ears," by a vote of 66 to 47.[39]

Pinchot, with the help of the Secretary of the Interior and the

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[36] H. R. 10306, H. R. 11536; 57 Cong. 1 sess.

[37] H. Report 968.

[38] *Cong. Rec.*, Feb. 11. 1901, 2247.

[39] *Cong. Rec.*, June 9, 1902, 6509-6526; June 10, 6566-6573: *Report*, Sec. of Int., 1904, 28, 380.

Commission[illegible] Land Office, continued his campaign to secure the transfer of the forest reserves, however, and early in Roosevelt's administration, Mondell brought in a bill to make the transfer.[40] The Senate committee reporting the bill loaded it down with such a mass of provisos that the original purpose was somewhat obscured,[41] but this measure finally passed both houses without much opposition.[42]

Thus the transfer of the forest reserves to the Department of Agriculture was finally effected by a western man, Mondell, whose name, in the year just previous, had headed the list of signatures to a House report which asserted the impracticability of any such transfer.[43] In the Senate, another western man, Warren of Wyoming, introduced two bills in the fifty-eighth Congress, providing for the transfer of the reserves to the Department of Agriculture. Warren later develeped into a moderate conservationist on forestry questions, and, perhaps even at this time, a regard for the forests might explain his action, but Mondell was always an active enemy of the forest reserves, and his action must be explained differently. The explanation is perhaps indicated in a memorial of the Idaho Wool Growers Association, which in 1903, prayed Congress for a law transferring the reserves to the Department of Agriculture because the Department of the Interior was shutting many of the stockmen out.[44] The Department of the Interior, under Secretary Hitchcock, was developing a policy too vigorous to suit some of the western men, and it seemed to be thought that a change could at least make matters no worse. The Department of Agriculture, under Pinchot's influence, was turning to a more liberal policy in grazing matters.

The act of 1905 contained several provisions besides the one shifting the forest reserves to the Department of Agriculture. The western men secured a little political concession requiring the selection of forest supervisors and rangers, when practicable, from the citizens of the states or territories in which the reserves were located; while the conservation forces secured a provision requiring that money received from the sale of timber should, for a period of five years, constitute a special fund for the protection, administratio[illegible]vement, and extension of the reserves. This provision slipped through Congress because no one in Congress had any idea that the receipts would ever amount to much. At the time, it was too small a sum to be of great importance, and it had not been growing much from year to year. Immediately after the transfer, however, the imposition of a charge for grazing in the forest reserves increased the receipts very greatly; and for two years Pinchot had funds for building up rapidly an efficient system of administration, without interference from Congress. This special fund was abolished in 1907—as soon as Congress realized how much power it placed in the hands of the forester—but in the meantime it had served an extremely important purpose.

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[40] H. R. 1987; 58 Cong. 1 sess.: H. R. 8460; 58 Cong. 2 sess.

[41] S. Report 2954; 58 Cong. 3. sess.

[42] *Stat.* 33, 628.

[43] H. Report 968; 57 Cong. 1 sess., Pt. 2.

[44] *Cong. Rec.*, Dec. 17, 1903, 312.

Under the Department of Agriculture, the forest reserves received what *appeared to be* increasingly generous appropriations. The Bureau of Forestry became the Forest Service, and received in one sum the appropriations which had hitherto been made in two separate items—to the Bureau of Forestry for investigations, and to the Department of the Interior for protection and administration of the reserves. The sums appropriated by Congress after 1905 were very large, compared with appropriations of earlier years; but the forest reserve receipts also increased very greatly, and in 1907 and 1908 even exceeded the cost of administration.[45]

OPPOSITION TO INCREASED APPROPRIATIONS

These increasing appropriations were not secured without some opposition, but by no means all of the opposition came from the West. In 1903, for instance, it was the Senate, the stronghold of western sentiment, that raised the House appropriation for the Bureau of Forestry nearly $85,000;[46] and in the discussion in the Senate there was no particular opposition from the West; in fact, it was Rawlins of Utah who seemed most anxious for better protection of the forests.[47] In the Sundry Civil Bill of the same year,[48] a Senate committee

[45] *Stat.* 33, 872; 34, 685, 1269-1271: S. Doc. 141; 59 Cong. 2 sess.: H. Doc. 681, 62 Cong. 2 sess.: *Forestry and Irrigation*, Jan., 1907, 14: Fernow, "History of Forestry," 419.

[46] *Cong. Rec.*, Feb. 24, 1903, 2548.

[47] *Ibid.*, 2547.

[48] H. R. 17202; 57 Cong. 2 sess.

raised the House appropriation for the protection of forest reserves from $325,000 to $400,000;[49] and this amendment was agreed to in the Senate without a comment. In both these bills, the final amount provided represented a compromise between the two houses, with the Senate calling for the larger appropriation. The situation in 1904 was similar, and so again in 1905.[50] In 1907, on the proposal to give the Forest Service $500,000 for working capital and permanent improvements, it was Mann of Illinois who raised the point of order, while in opposition to this extra appropriation, the western anti-conservationists, Carter, Heyburn, Fulton, Clark, and Patterson, were assisted by several men from central and eastern states—Tawney of Minnesota, Mann of Illinois, Hemenway of Indiana, and Lodge of Massachusetts.[51]

Thus it is clear that the division on the question of these appropriations was not sectional, as on most conservation questions. Several reasons may be given for the failure of the western men to put up a stronger fight against the appropriations. In the first place, irrigation was assuming greater importance, and some of the men saw that forest destruction would involve hardship for the settler dependent upon a steady water supply. Also, the Secretary of the Interior was, during these years, giving some free timber to settlers in the vicinity of the reserves, and this made them look more kindly upon the reservation policy, and upon the appropriations for carrying that policy into effect.[52] As a further reason for the changed attitude of some of the western men, it has been suggested that some of the timbermen who had secured land, in some cases at a fairly high price, finally saw that it was to their interest to advocate the reservation of other land which might come into competition with their holdings. This would limit the supply of timber available to other lumbermen, and so enhance the value of their own holdings. Such an attitude as this might be natural enough for those lumbermen who had no intention of securing more lands.

Some of the stockmen enjoyed free grazing privileges,[53] and a few of them actively favored government regulation, such as existed in the forest reserves, because it prevented overgrazing and minimized the disputes constantly arising among claimants to grazing districts.[54] Finally, there can be little doubt that one of the main reasons for the attitude of the western men was the fact that the money appropriated was spent in their own vicinity, and not all of it in "interfering with the development of the West." Part of the appropriations—$500,000 in 1907—was spent for roads and improvements of various kinds. The benefits thus accruing were probably exaggerated, for the average man sees too much advantage in "money spent at home."

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[49] *Cong. Rec.*, Feb. 25, 1903, 2621.

[50] S. Report 811; 58 Cong. 2 sess.: S. Report 3567; 58 Cong. 3 sess.

[51] *Cong. Rec.*, Jan. 29, 1907, 1906-1909; Feb. 19, 1907, 3292-3300.

[52] *Report*, Sec. of Int., 1902, 241: Statistical Abstract, 1907, 113.

[53] *Report*, Sec. of Int., 1902, 241.

On the other hand, the opposition of such eastern men as Mann, Hemenway, and Lodge arose partly from a sincere belief that the administration of the forest reserves was becoming extravagant, and partly from a well-founded fear that the conservation movement was becoming a menace to some of the business interests they represented. Some of the railroads, coal mining interests, oil interests, as well as timber interests, had headquarters in the East, and they saw their "green pastures" disappearing as the reservation policy broadened to include more and more of the natural resources which had before been open to private exploitation. Some of these men represented the anti-administration wing of the Republican party which grew up in the latter years of Roosevelt's administration.

On the whole, the increase in appropriations was unquestionably significant of a changing attitude toward conservation, yet its significance is qualified by several considerations. In the first place, most government expenditures were increasing rapidly. The expenditures for the entire Department of Agriculture, for instance, increased during this same period, from $3,000,000 to $10,000,000—over 300 per cent.[55] The country was prosperous, and the government extravagant, so that larger appropriations were hardly as significant as they would have been under other circumstances. In the second place, it must be remembered that these appropriations did not bring conservation squarely into issue; and, finally, it will be noted that the number of national forests was increasing rapidly, and the appropriations had to cover an increasingly large area, while the income from the forest reserves was increasing faster than appropriations were.

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[54] *Cong. Rec.*, Feb. 18, 1907, 3189: *Proceedings,* Am. Forestry Assoc., 1894-95-96, 71: S. Doc. 189, 58 Cong. 3 sess. (diagram in back of book). For a description of the difficulties arising under unregulated grazing see *Forestry and Irrigation,* Apr., 1907, 211.

[55] Statistical Abstract, 1907, 660.

CREATION OF NEW RESERVES

Cleveland's forest reserve proclamations of February 22, 1897, were the last he made, for his term expired shortly afterwards, but McKinley had been in office less than a year when he established his first reserve,[56] and during his term of office he increased the number of forest reserves from twenty-eight to over forty,[57] covering in 1901 a total area of about 50,000,000 acres.

President Roosevelt was far more aggressive in his reservation policy than his predecessors had been. His policy, however, should be credited mainly to his chief forester, Pinchot; in fact, it is perhaps only fair to say that for a very large part of the 150,000,000 acres of forest reserves which are now the property of the American people, credit is due to Gifford Pinchot, who was Roosevelt's most trusted assistant and adviser. Pinchot saw that the government was rapidly losing its timber land, and he organized a field force to gather information as the basis of recommending reserves. During these years, the timbermen of the Lake states were looking westward for new fields to exploit, and their agents in the West were assembling blocks of timber land as fast as they could. Thus proceeded the race between the government and the private individuals for the remaining western timber. Roosevelt set aside thirteen reserves in the first year of his administration;[58] and his zeal increased prodigiously in the last years of his administration. In 1907, the number of national forests had been increased to 159, with a total area of over 150,000,000 acres—three times the area at the beginning of Roosevelt's administration.[59]

IMPROVEMENT OF THE FOREST FIRE LAW

Congress made some advances in the protection of timber in other ways than by providing money. In the first place, the law against setting forest fires was somewhat improved. The act of 1897 had provided that any person who should "willfully or maliciously" set fire, or "carelessly or negligently" leave a fire unattended near an timber, should be punished by a fine of not more than $5000 or b imprisonment for not more than two years.[60] This law left upon th government the burden of proving willfulness, malice, carelessness, o negligence in order to secure a conviction under the law—an imposs ble task in almost all cases.[61] In 1900, this difficulty was partiall removed by striking out the words "carelessly or negligently,"[62] bu the law, even as thus amended, was not a very efficient instrument fo the punishment of trespassers, for it still required the government t prove that any fire set was set "willfully or maliciously." The law wa also still defective, perhaps, in not containing a moiety provision i behalf of informers.[63] Considerable progress seems to have been mad however, in reducing the number of forest fires, especially in reducin the number of camp fires left burning; and in 1909, the law wa further modified.[64]

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[56] *Stat.* 30, 1767.

[57] *Report,* Land Office, 1901, 107.

[58] *Stat.* 32, 1988-2030.

[59] *Report,* Land Office, 1907, 20.

AUTHORITY TO ARREST TRESPASSERS WITHOUT PROCESS

Enforcement of the forest fire law, and of all laws for the protec tion of the forest reserves, was facilitated by an act passed in 190 giving officers of the United States the authority to arrest, withou process, any person found violating a law or regulation governin the forest reserves or national parks.[65] Many of the reserves wer very large, and even if rangers happened to apprehend persons in th act of violating a law or regulation, they must often go a distance o twenty miles or more to get the judicial process necessary to make a arrest. Thus the government officers were often practically helples for the Attorney-General held that the right to make arrests withou warrant, in such cases, was at least questionable.[66] In 1899, the Lan Office recommended legislation to meet this condition,[67] and in 190 bills were introduced by Representative Lacey of Iowa and Senator Hansbrough of North Dakota, but both measures were smothered in committee.[68] Two years later a bill passed the Senate,[69] and was favorably reported in the House,[70] but never came to a vote there. In 1904, a bill introduced by Representative Wallace of Arkansas passed the House,[71] and was brought up in the Senate by Depew of New York, but Senator Teller saw a "very important constitutional question" as to whether the United States had criminal jurisdiction over some of the reserves, and his objections sent the bill back to the calendar.[72] It was, of course, true that such a power as this might sometimes be abused, or, as one western writer expressed it, "might give additional means of annoyance and intimidation" to the rangers; but, in the next session of Congress, five days after the transfer of the reserve to the Department of Agriculture, the power was finally granted.[73]

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[60] *Stat.* 29, 594.

[61] H. Report 482; 56 Cong. 1 sess.

[62] *Stat.* 31, 169.

[63] *Reports*, Land Office; 1900, 114; 1901, 123.

[64] In 1901, forest rangers discovered 1335 such fires; in 1902, 1083, and in 1903 only 597. (*Report*, Sec. of Int., 1903, 328: *Stat.* 35, 1088.)

[65] *Stat.* 33, 700.

[66] S. Report 2624; 57 Cong. 2 sess.

[67] *Report*, Land Office, 1899, 128.

[68] H. R. 8912, S. 3947; 56 Cong. 1 sess.

[69] *Cong. Rec.*, Feb. 7, 1903, 1889.

[70] H. Report 3860; 57 Cong. 2 sess.

[71] *Cong. Rec.*, Apr. 23, 1904, 5449.

[72] *Cong. Rec.*, Apr. 27, 5672.

[73] *Stat.* 33, 700.

CHAPTER V

THE FOREST RESERVES SINCE 1897 (CONTINUED): ANTI-CONSERVATION ACTIVITY

ANTI-CONSERVATION ACTIVITY

It was during the latter part of the decade 1897-1907 that a definite anti-conservation party grew up. With the development of a comprehensive forest policy and with the extension of the idea of conservation to other resources than timber, certain interests felt that they were threatened, and united in opposition. Of course there could be no definite party opposed to conservation until "conservation" was given a definite meaning, and Pinchot and Roosevelt were the ones who gave it a definite meaning—who inaugurated what has been termed the "conservation movement."

In order to get a well-balanced conception of the progress made since 1897, it will be necessary to consider in detail the activity of the anti-conservation forces. It has been seen that the appropriation bills did not bring the conservation issue squarely before Congress. The western men generally showed no particular opposition to increased appropriations; but the attitude of some of them toward conservation was not radically changed, as will now be shown.

FACTORS TENDING TO AROUSE WESTERN HOSTILITY: AGRICULTURAL LANDS IN THE FOREST RESERVES

One of the reasons most often given for western discontent during this period was the inclusion of agricultural lands in the forest reserves. The act of 1897 had forbidden the inclusion of such lands, but some had previously been included, and even in later proclamations it was not always possible to avoid the inclusion of some agricultural land. Such land could be eliminated only by proclamation of the President, or by special act of Congress. Settlers within the forest reserves were allowed to hold their lands through permits issued by the

Fores[illegible] Se[illegible], but of course they lacked incentive to improve their home[illegible] bec[illegible] they could not obtain title, and the forester might at any time re[illegible]e their permits.[1]

It is not to be supposed that all of the western men who railed at the reserves, and at the inclusion of agricultural lands, were inspired entirely by sympathy for these settlers. Some of them disliked the reserves anyhow, were always quick to seize any pretext for an attack upon the forest reserves or upon the Forest Service, and the "hardships of the settlers" served excellently for debating purposes. Later developments in certain sections indicate that many of the complaints regarding the inclusion of agricultural land, probably most of them, really arose from the fact that the creation of forest reserves prevented speculators from acquiring land which was *not* really fit for agriculture.[2]

There was no dispute in Congress as to the desirability of opening up agricultural lands to settlement. All agreed that this should be done, but there was a clear division on the question as to *how* it should be done. The conservationists wanted the opening up of such lands left to the discretion of the Secretary of the Interior—later the Secretary of Agriculture, who should ascertain the character of [illegible] land *first*, and then formally open it to settlement. Most of the western men were opposed to giving the Secretary any discretion in the matter, and favored either a law *compelling* him to open up such lands, or a law opening up the forest reserves to all who cared to make entry.

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[1] *Stat.* 30, 34: "Land Decisions," 29, 593; 30, 44: *Forestry and Irrigation*, June, 1906, 267: *Report*, Sec. of Int., 1902, 321, 322.

[2] Thus over 400,000 acres were eliminated from the Olympic National Forest in 1900 and 1901 on the ground that the land was chiefly valuable for agriculture and that the "settlement of the country was being retarded." The land thus eliminated for *agricultural* use was largely taken up under the Timber and Stone Act, which requires oath that the land is *"valuable chiefly for timber but not fit for cultivation."* Three companies and two individuals later acquired over 178,000 acres of it, in holdings of from 15,000 to over 80,000 acres each. Of timbered homestead claims on this eliminated area, held by 100 settlers, the total area under actual cultivation in 1900 was only 570 acres, an average of but 5.7 acres to each claim. In 1906, petitions were presented to the President and the Secretary of Agriculture asking that certain lands in the Bitter Root Forest Reserve should be restored on the ground that they were unusually well adapted to apple orchards. Examination proved that this land was covered with a fine growth of pine, so the Forest Service decided that the land would not be opened until the timber had first been removed. This was not at all satisfactory to the applicants, who said the timber should be left as a bonus to the homemakers.

In one case the Forest Service received fifty-nine applications for eliminations, and three of these were found to be bona fide. In another case where land was given to "settlers" for agricultural purposes, the timber was merely cleared off and not one acre in thirteen was ever cultivated. ("Lumber Industry," I, XIX, 267: *Forestry and Irrigation*, Feb., 1907, 60, 61.)

Some reason and logic there was in the latter position. The western men naturally chafed under the necessity of going to the Secretary of the Interior or the Secretary of Agriculture every time they wanted a tract of land opened up to settlement. There were considerable areas of land in the forest reserves which were susceptible of cultivation, and any elimination of such lands was a slow process, being dependent on the tardy and cumbersome movements of a Federal department. The western people, like frontiersmen everywhere, were impatient of delay, and always wanted *rapid development*. Furthermore, doubtless many of them feared that if discretion were left with the secretary, some of the land, however good for agricultural purposes, would never be opened to entry at all; and who could be a better judge of its fitness for agricultural uses than the entryman who was willing to try to make a living on it?

This was a short-sighted view, however. Even though the Secretary of the Interior might be very slow to open up lands, or might fail altogether to open them up to entry, it was best for the future of the reserves that he should have some discretion in the matter; and it would have been a very serious mistake to throw the reserves open indiscriminately to all who might want to make entries, for many would have made entries with no intention of proving up, but merely with the object of clearing off the timber, or perhaps with the intention of securing mineral deposits or other valuable resources.

THE LACEY BILL

Lacey of Iowa, of the House Committee on Public Lands, introduced two bills in 1904, providing for the elimination of agricultural lands in the forest reserves, and for their later disposition—both measures strongly urged by the Secretary of the Interior; but neither of them ever became law, although one of them passed the House.[3]

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[3] *Report*, Sec. of Int., 1904, 27, 28: H. R. 13631, H. R. 13633; 58 Cong. 2 sess.: H. R. 17576; 59 Cong. 1 sess.

Two years later Lacey brought forward another bill, which finally passed Congress in spite of opposition from certain western men.[4]

The Lacey bill of 1906, following conservation ideals, left the opening of these lands to the discretion of the Secretary of Agriculture. The real merits of the bill were not given much attention in the debates, most of the discussion consisting in attacks upon the forest reserves, with an occasional voice raised in their defense. Hogg of Colorado attacked the measure on the ground that it left the Secretary of Agriculture too much discretion in regard to the opening of the lands. Mondell had always complained a great deal about the amount of agricultural land locked up in forest reserves, and had tried to get a bill through Congress providing for their elimination;[5] but Lacey's measure he promptly attacked, on the ground that it would lead to undue extension of the reserves. Smith of Arizona ventured the assertion that there was no longer any room left in the West for more reserves, but Mondell said there were still "patches of sage brush" which might be made the basis of further reservation. French of Idaho considered the bill "a sort of chloroform to the people of the West," while the policy of establishing forest reserves was being carried out.

Grazing interests were strong in Congress, and were to some extent opposed to this measure. Thus, Smith of California secured the exclusion of his state from the provisions of the bill, on the ground that grazing lands were better left under the control of the Secretary of Agriculture. This may have meant merely that Smith preferred grazing under regulations to no grazing at all, for grazing lands were sometimes also fit for cultivation, and land opened to settlers was, of course, eliminated from the stock raiser's domain. Also, California had a "no fence" law, according to which settlers were not required to fence against grazing animals, the duty of keeping the animals off of such claims resting with the stockmen. Thus, the stockmen in that state found scattered settlers a source of considerable trouble and expense, and so they were not particularly anxious to increase the number of them. Martin of South Dakota, on the other hand, favored the bill because he considered that it would protect the interests of the settlers as against the stockmen. Mondell held that it was "no part of a proper forest reserve policy to attempt to settle range controversies."

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[4] *Cong. Rec.*, Apr. 17, 1906, 5392 et seq.

[5] H. R. 14053; 58 Cong. 2 sess. See also *Cong. Rec.*, Apr. 7, 1906, 4918.

Not all western men were lined up in opposition. Some of them voted for the bill, but, as Dixon of Montana explained, it was not because the bill was exactly what they wanted, but because they thought "half a loaf was better than no bread."

In spite of all opposition, Lacey's bill finally became law, and soon afterward Congress provided funds to meet the expense of restoring agricultural lands to the public domain.[6]

GRAZING IN THE FOREST RESERVES

In the forest reserve problem, grazing always played about as important a part as forestry, and for this reason must receive careful consideration. When the reserves were opened to mining in 1897, miners ceased to have a constant grievance, but the same act that gave the miners access to the reserves gave the Secretary of the Interior the right to shut stockmen out.

Cattle and horses were not shut out from any of the reserves, the only requirements for the pasturage of such animals being an agreement by the applicant that he would comply with the rules and regulations of the Secretary of the Interior. In 1900, however, the regulations were amended so as to require applications for the privilege of grazing all kinds of livestock in the reserves. This new ruling permitted some regulation of the number of cattle and horses, but the matter seldom involved serious difficulty, since the number of animals authorized was often considerably in excess of the number for which permits were sought. Since sheep were shut out of some of the reserves, the cattlemen in some regions had good reason to be friendly to the reservation policy.[7]

Sheep grazing proved a knotty problem. Soon after the act of 1897 was passed, regulations were issued prohibiting the pasturing of sheep in all the reserves except those in Oregon and Washington. It was claimed that sheep injured the forest cover, particularly in regions of limited rainfall.[8] Furthermore, it was reported that fires were often set by sheep herders to improve the grazing, the new shoots which started after a fire furnishing excellent forage for the animals. Such fires were generally started in inaccessible places, far from any road, to insure the burning of a large area before they could be put out.[9]

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[6] *Cong. Rec.*, Apr. 17, 1906, 5396; *Stat.* 34, 233; *Stat.* 34, 724. For later difficulties concerning the elimination of agricultural lands from the forest reserves see Cross References, pp. 255-260.

[7] *Report*, Land Office, 1900, 390; *Report*, Sec. of Int., 1903, 323.

At first, the Department of the Interior regulated grazing directly, but in 1902, the secretary decided that where there were wool growers' associations representing a majority of the sheep owners or of the interests involved in wool growing, such associations should be allowed to recommend the allotment of permits, providing they would see that permittees complied with all rules and regulations. Qualified wool growers' associations were found in four of the states, and they were given the allotment of the permits in several of the reserves, including one in Arizona and one in Utah, the rules being relaxed to permit some grazing in these two states. In general, the operation of the rule giving wool growers this authority did not prove satisfactory.[10] The issue of permits was often delayed, while too many sheep were generally allowed on the reserves, and in 1903, the Department of Agriculture again took charge of the allotment.[11]

No charge being made for the privilege of grazing, it was a difficult task to assign permits in such a way as to do justice to all applicants, but the department finally adopted rules giving stock preference in the following order, viz.: first, stock of residents within the reserve; second, stock of persons who owned permanent ranches within the reserve, but who resided outside; third, stock of persons living in the immediate vicinity; and fourth, stock of outsiders who had some equitable claim.[12] While this arrangement seems just, it was not accepted with good grace by some of the sheepmen. Those who had been in the habit of herding their stock upon certain lands insisted upon continuing the practice after the lands had been reserved, some of them going to the extent of openly defying all rules and regulations of the department.[13]

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[8] *Report*, Land Office, 1898, 87, 88.

[9] *Report*, Sec. of Int., 1902, 314: *Forest Bul.* 91, 6.

[10] *Report*, Sec. of Int., 1902, 332.

[11] *Report*, Sec. of Int., 1903, 322.

[12] *Report*, Sec. of Int., 1902, 332.

[13] *Ibid.*

It would be unfair to ignore the element of justice in the attitude of the sheepmen toward government regulation of their business. Like other western men, they were much imbued with the idea of individual liberty, and were impatient of restraint. They had herded their sheep over some of these grounds for many years—for so long that they came almost to feel a certain proprietary interest in them. Now comes the forest reserve, and with it a troop of officials and "scientific gentlemen"—for whom the western men usually had scant respect, anyhow. These new officials began to lay down rules and regulations, some of which, although wise and necessary, increased the difficulties under which sheep raising was carried on. As an old sheepman in Wyoming once expressed it: "Of course anyone can raise sheep, even according to the rules laid down by the forest officers; but raising sheep as a business man must—so as to make a profit—that is a different proposition." It is rather difficult for anyone not thoroughly familiar with western conditions to appreciate the attitude of some of the sheepmen in this matter.

In November, 1898, the Department of Justice advised the Department of the Interior that a criminal prosecution could be maintained against any person who herded sheep in a forest reserve, in violation of the rules and regulations provided; but two years later a United States District Court in California held that the act of 1897, in so far as it declared to be a crime any violation of the rules and regulations thereafter to be made by the Secretary of the Interior, was a delegation of legislative power to an administrative office, and therefore unconstitutional. The Attorney-General adhered to his opinion in spite of this decision, and suggested that other prosecutions be instituted, with a view to getting a case before an appellate court. Similar suits were therefore brought in northern California, Arizona, Utah, and Washington, but in each case the decision of the first court, although certainly erroneous, was sustained.[14]

The government had no right of appeal from these decisions, and in 1903, the commissioner advised the forest officers not to institute criminal proceedings in case of sheep trespass, but rather to secure an injunction against the parties to restrain them from entering or from remaining in the reserves. Such proceedings were instituted in several jurisdictions, and in every case the court granted the injunction. In one case the sheepmen appealed, but the Circuit Court of Appeals sustained the lower court in granting the injunction.[15] In many cases the prevention of stock trespass by this method of injunction was a slow process,[16] and some owners persisted in taking large numbers of sheep into the reserves, merely with the intention of obtaining the pasturage until ordered out by the court. Eventually, the United States Supreme Court held that the government could proceed against trespassing sheep owners under the law of 1897;[17] but, during the period from 1900 to 1911, that right was not generally admitted; in fact, during the earlier years of that period, it was generally denied.

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[14] *Opinions,* Atty.-Gen., 22, 266: U. S. vs. Blasingame; 116 Fed. Rep. 654: Dastervignes vs. U. S.; 122 Fed. Rep., 34: U. S. vs. Deguirro; 152 Fed. Rep., 568: U. S. vs. Domingo; 152 Fed. Rep., 566: U. S. vs. Bale; 156 Fed. Rep., 687: U. S. vs. Rizzinelli; 182 Fed. Rep., 675: U. S. vs. Grimaud; 220 U. S., 506: Light vs. U. S.; 220 U. S., 523: *Report,* Sec. of Int., 1903, 324. See also Dent vs. U. S.; 8 Arizona, 138.

In 1903, Secretary Hitchcock sent to the Speaker of the House a bill to remedy this condition of affairs, by specifically forbidding the pasturing of livestock in forest reserves without permission of the secretary, but the bill was never given any consideration. In 1905, the House Committee on Agriculture inserted an amendment into the Agricultural Appropriation Bill, providing a penalty for grazing without permission, but Martin of South Dakota thought the penalty of $1000 too severe, and his point of order eliminated the amendment. During the same session of Congress, another bill for accomplishing the same purpose passed the House, but never emerged from the Senate Committee.[18]

The lack of a law specifically prohibiting grazing would have been less seriously felt if there had been some way by which the department controlling the reserves could impose a reasonable charge for grazing.

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[15] *Report*, Sec. of Int., 1903, 324, 325: *Report*, Dept. of Agr., 1905, 206: U. S. vs. Dastervignes; 122 Fed. Rep., 30.

[16] In one case, where 34,000 sheep were found trespassing on the Sierra Forest Reserve, the marshal would have had to travel a distance of about 400 miles to get an injunction. (*Report*, Sec. of Int., 1903, 325.)

[17] U. S. vs. Grimaud; 220 U. S., 506.

[18] H. Doc. 12; 58 Cong. 1 sess.: *Cong. Rec.*, Jan. 27, 1905, 1487: H. R. 6480; 58 Cong. 2 sess.

The act of 1897 had authorized the secretary to sell the timber growing on the reserves, but had not authorized the sale of grazing privileges. The need of such authority was soon recognized, and in 1900, Secretary Hitchcock sent a bill conferring it to the Speaker of the House. Lacey introduced the bill twice, but it was never reported.[19]

These attempts having failed, Chief Forester Pinchot and Secretary of Agriculture Wilson decided that, without further legislation, the act of 1897 might be construed to authorize a charge for grazing. That act had provided that the Secretary of the Interior might "make such rules and regulations and establish such service" as would "insure the objects of such reservations, namely, to regulate their occupancy and use and to preserve the forests thereon from destruction." This did not specifically authorize any charge for grazing, but it did not prohibit it, and, beginning January 1, 1906, a small charge was made for that privilege.[20] This action aroused considerable opposition in some sections. Meetings were held and petitions drafted, asking for modifications in the rates, or, in some cases, for an entire remission of the fee. The regulations were soon modified somewhat, giving settlers a half rate for a certain number of cattle, but even as amended they tended to arouse a hostility toward the forest reserves. There was some talk about "taxation without representation," and one western publication even went so far as to propose secession of the western states from the Union.[21] Secretary Wilson and Pinchot stood firm, however, and President Roosevelt gave them his full support.

Roosevelt doubtless made many enemies in the West by his stand on this and other conservation questions, but he always held his ground firmly in spite of adverse criticism. This is indicated clearly by the following excerpt from a letter written to Senator Heyburn, in reply to some of Heyburn's criticisms of the forest reserves: "The other clippings you send relate to party matters, and strive to make it appear that the forest reserve question in Idaho is a matter of political importance. Now, when I can properly pay heed to political interests, I will do so; but I will not for one moment consent to sacrifice the interests of the people as a whole to the real or fancied interests of any individual or of any political faction. The government policy in the establishment of the national forest reserves has been in effect for some time; its good results are already evident; it is a policy emphatically in the interest of the people as a whole, and especially to the people of the West; I believe they cordially approve it, and I do not intend to abandon it."[22]

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[19] H. Doc. 598; 56 Cong. 1 sess.: H. R. 10756; 56 Cong. 1 sess.: H. R. 8329; 57 Cong. 1 sess.

[20] H. Doc. 6; 59 Cong. 2 sess., 278. Regarding the question of the right to make this charge, see *Opinions*, Atty.-Gen., 25, 473; 26, 421.

[21] *Forestry and Irrigation*, July, 1907, 341, 342, 355.

EFFORTS TO OPEN THE RESERVES TO GRAZING

There had been, from the very first, considerable opposition to all regulations of grazing. On February 13, 1899, Senator Warren presented a petition in Congress praying that grazing be allowed without any restriction. The next day, Smith of Arizona presented a similar memorial from the legislature of his state. These petitions seemed to bear little immediate fruit, but, two years later, a determined effort was made in Congress to break down the secretary's regulations by means of an amendment to the Sundry Civil Bill, an amendment permitting grazing within the reserves. "Slippery Tom" Carter of Montana proposed the amendment, but Teller was its main advocate in Congress. Teller and Carter were aided in the debates by Warren of Wyoming, Rawlins of Utah, and Shoup of Idaho, each of whom wished his state to be included in the provisions of the amendment; while Heitfeld of Idaho suggested that the amendment be extended to all public land states.[23]

Senator Platt of Connecticut led the opposition to the proposal. Pettigrew also opposed, basing his arguments against the amendment mainly on the injury done by sheep to the trees in the reserves. "I believe the forest reservation law was a good one," he said further, "and that it has been of great advantage to the West, and that we ought to preserve these forests, keep down the fires, and renew the forests as trees are cut down."[24] In spite of the opposition of Platt and Pettigrew, the amendment was agreed to in the Senate,[25] but the

[22] *Forest Bul.* 67, 77.

[23] *Cong. Rec.*, Feb. 13, 1899, 1781; Feb. 14, 1879; Feb. 7, 1901, 2075; Feb. 28, 1901, 3224.

[24] *Cong. Rec.*, Mar. 1, 1901, 3283.

[25] *Ibid.*, 3285, 3571.

House balked, and the conference committee, after considerable wrangling, finally recommended that the Senate withdraw its proposal. So this attempt to open the forest reserves to unrestricted grazing ended in failure.

✓ Considerable attention has here been given to grazing matters, but it must be remembered that, as previously stated, grazing played about as important a part as forestry in the history of the reserves during this period. The reserves had been extended to embrace vast areas of grazing land;[26] in fact, the receipts from grazing permits often exceeded the receipts from the sale of timber. This inclusion of grazing lands in the forest reserves brought the grazing interests into frequent conflict with the Forest Service, aroused a hostility toward the reserves, and in this way exercised a very important influence in determining congressional action regarding the reserves.

THE PUBLIC LANDS CONVENTION AT DENVER

The attitude of some of the western grazing interests was indicated pretty clearly in the Public Lands Convention, which met at Denver in June, 1907. This convention, one of the most important ever held in the West, was attended by hundreds of delegates from the grazing states. Among those in attendance were Congressmen Bonynge of Colorado, Mondell of Wyoming, and Taylor (Congressman-to-be) of Colorado; and Senators Shafroth of Colorado, Carter of Montana, and Clark of Wyoming, besides other western men, great and small. On the nomination of Senator Teller and Congressman Bonynge, Senator Carter was chosen temporary chairman, and Dr. Wilson, a big sheepman of Wyoming, was elected permanent chairman.

Not only were the grazing interests fully represented, but the administration had men there—Secretary of the Interior Garfield, Pinchot, Newell of the Reclamation Service, and several others. Pinchot had summoned a few of his experienced officers, in order that they might be on hand to give information, if necessary.

The convention was the scene of bitter debates, of attacks upon President Roosevelt and his administration, of violent quarrels over the credentials of the delegates. Charges were made on both sides that the convention had been "packed." The charge was made, on the one hand, that Colorado and Wyoming were trying to seat too many delegates; and these two states really had a great majority of the delegates present—perhaps 80 per cent—while California had only a few delegates. On the other hand, it was freely charged that forest officials had tried to pack the convention with their own supporters; and there was an element of truth in this, for Pinchot later removed one official who had been accused of favoring supporters of the Forest Service in issuing the tickets to the galleries.

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[26] "Lumber Industry," II, 16.

AGGRESSIVE POLICY OF ROOSEVELT AND PINCHOT

Not only did Roosevelt and Pinchot enforce the laws vigorously, but they often did things which no law required—went beyond the mandatory provisions of the law, where it was necessary to protect the public interests. They did not hang back, after the fashion of ordinary government bureaus, and wait for Congress to give specific orders; but vigorously took the initiative whenever conditions demanded action. The regulation imposing a charge for grazing in the forest reserves was an illustration of this. There was in the law itself no provision authorizing such a regulation, but neither was there any law forbidding it and the public interests demanded it. Such a policy as this naturally aroused considerable hostility in Congress and elsewhere, among those who look upon Congress as the seat of all authority, and regard the administrative offices as mere agencies to carry out the will of that august body. Roosevelt's and Pinchot's policy was regarded by some as "autocratic," and subversive of our democratic liberties.

Even though this aggressive policy thus aroused some hostility, it was wise—perhaps even absolutely necessary to the success of the forest reserve policy. If Pinchot had waited for Congress to take the initiative and lay down rules for the administration of the forest reserves, he might be waiting yet; and the forest reserves, with little intelligent provision for their use and administration, would have been a failure. Instead of being a public enterprise beneficial to the people of the West, they would have been obstructions in the path of economic development, until the rising tide of irritation would have swept them away. It was extremely fortunate for the country that during these years there was a man at the head of the Forest Service with energy, and enterprise, and intelligence enough to push ahead without waitin for any signals from Congress. Congress had seldom evinced an capacity to deal intelligently with the timber lands, or with most othe natural resources—in fact, some very discerning students of Amer can government are inclined to doubt whether it is generally possibl for Congress to deal intelligently with any sort of problem. Certai it is that most intelligent legislation is to be credited not to th initiative of Congress itself, but to outside influence—often th pressure exerted by an "autocratic" President.[27]

THE FOREST LIEU ACT

In order to understand the attitude of the West during these year it will be necessary to look into yet another matter, however—into th operation of the Forest Lieu section of the act of 1897. This section which may be designated as the Forest Lieu Act, provided that wher an unperfected claim or patent was included within a forest reservation, the settler or owner thereof might relinquish the tract to th government, and select another tract of land outside of the reserve The abuses arising under this provision were conspicuous features i the history of forest reserves during this period, and without doubt played an important part in determining the fate of the reservation policy in the critical days of 1907.

The Forest Lieu Act, like the Railroad Indemnity Act of 1874, was manifestly unfair to the government. It permitted an exchange in which it was certain that the government would lose, for no owner of land would relinquish it and select other land unless he could gain by the transaction.[28] Worthless land of all kinds was relinquished, in some cases land naturally valueless, in some cases timber land stripped of all merchantable timber. Entrymen under the Timber and Stone Act, for instance, would sometimes cut all the timber from their lands, and then relinquish them and select other tracts of valuable timber land under this law.[29]

The Forest Lieu Act provided for the selection of a "tract of vacant land open to settlement." Secretary Bliss held in 1898 that this did not permit the selection of unsurveyed lands, since it was a general rule that no portion of the public domain was subject to disposal until after survey, and the statute had not specifically authorized the selection of unsurveyed lands. The following year, his successor, Hitchcock, reversed this decision, however, and held that both surveyed and unsurveyed land might be selected under the act, on the ground that the statute made no distinction between surveyed and unsurveyed lands, and contained no words which indicated any intention on the part of Congress to limit selection to surveyed lands. Secretary Hitchcock considered the language "so clear and explicit as to leave no room for construction."[30] Whatever may be said as to the logic of this decision, it was most unfortunate in its results. The right to select from unsurveyed lands was a benefit mainly to railroad companies. It could be of little use to settlers, because they would not only have to select lieu lands, but, in order to get title, would have to reside upon them until surveys could be made.[31]

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[27] Cross Reference, p. 143.

[28] *Report*, Sec. of Int., 1903, 321.

[29] *Report*, Land Office, 1899, 115.

Private holdings within the forest reserves were of three general classes: first, those of settlers who had gained title through the various settlement laws; second, those in which the title was acquired through the state by the various educational grants; and third, railroad lands, or lands acquired from the land grant railroads, wagon roads, etc.[32]

Of these three classes of lands, the first, comprising those owned by settlers, was of no great area or importance, although, in actual numbers, these holdings exceeded the other two combined. The second class, the state school lands, included sections 16 and 36 in each township, in all of the states except Utah, where sections 2, 16, 32, and 36 were granted, but it is uncertain how much of these school lands was used as basis for lieu selections. In some cases, Congress had imposed restrictions or conditions as to the disposition of the lands, and in some of the states the provisions regarding their disposition were such that they could not be used as basis; yet, in some of the states, notably in California and Oregon, these school lands were available in considerable amounts, and "school land scrip" was a recognized article of trade among the timbermen and speculators. It has been stated that California, while under "Southern Pacific government," sold most of her school lands for $1.25—later $2.50—per acre.[33] The history of the California school lands is not a particularly edifying tale.

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[30] "Land Decisions," 27, 472; 28, 284.
[31] H. Report 1700; 56 Cong. 1 sess.
[32] H. Report 2233; 58 Cong. 2 sess.

Railroad lands formed the great bulk of private holdings in the forest reserves. In January, 1904, the Commissioner of the Land Office estimated that over 3,500,000 acres of railroad lands were included within existing reserves, while as much more was included in reserves then temporarily set aside.

Commissioner Hermann held in 1898 that the Forest Lieu Act was intended to apply only to settlers or owners of agricultural lands, who felt that by the inclusion of their holdings within the limits of a forest reserve, they were deprived of the advantages that accrue from intercourse with neighbors, from adequate schools, roads, etc. This seemed a reasonable interpretation of the act, but the following year, Secretary Hitchcock held that the act applied to "any tract covered by an unperfected bona fide claim under any of the general laws of the United States, or *to which the full legal title has passed out of the government and beyond the control of the Land Department by any means which is the full legal equivalent of a patent.*"

Thus railroad lands, upon survey and patent, became immediately available bases of exchange under the provisions of the law. If the railroads did not see fit to take advantage of the exchange provisions of the law, they could dispose of their lands at an enormously increased price because of the privilege of selecting lieu lands. According to a decision of the Secretary of the Interior, owners of land within the reserves might even strip it of timber and then relinquish it and select other land elsewhere.[34]

The difficulties experienced in connection with these selections necessitated greater care in the establishment of reserves, to avoid the inclusion of worthless or denuded lands; and in the proclamation creating the San Francisco Mountains Forest Reserve in Arizona, the scheme adopted was to include only the vacant unappropriated timber lands. Most of the land in the reserve was worthless for its timber—some entirely barren, some covered with scrub timber and a small amount denuded, and every alternate section of this land belonged to the Santa Fé railroad, which ran through the district proposed for reservation. Some of this worthless land would have made excellent basis for lieu selections, but the proclamation reserved only even numbered sections, thus establishing a sort of checkerboard reservation.[35]

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[33] *Outlook,* Nov. 23, 1912, 665 et seq.; Feb. 8, 1913, 289: *Cong. Rec.,* Mar. 3, 1913, 4823.

[34] *Report,* Sec. of Int., 1898, 89: "Land Decisions," 28, 329, 521: H. Report 2233; 58 Cong. 2 sess., p. 5. The first lieu selections of the Northern Pacific in Montana, Idaho, Washington, and Oregon, were made by the company itself and most of the land was afterward sold to the Weyerhauser Timber Company; but the latter practice of the Northern Pacific was to sell its rights in the form of scrip, leaving the purchaser to select the land. In the case of the Atlantic and Pacific grant in New Mexico and Arizona, about 735,000 acres of lieu land scrip was secured and located by the Santa Fé Pacific—the successor to the Atlantic and Pacific, and by several other corporations and individuals. ("Lumber Industry," I, 229, 242; II, 77, 78.)

The opportunity which the Forest Lieu Act gave for profitable disposal of worthless lands no doubt furnished the motive behind many of the petitions praying for the establishment of forest reserves in the West. In 1901, the Commissioner of the Land Office had on file petitions and recommendations from various sources, seeking the creation of over 50,000,000 acres of reserves,[36] a considerable proportion of this area consisting of railroad and private lands. In one proposed reserve alone, there were 250,000 acres of an old land grant, secured long before through a Mexican title of questionable validity. At one time, three United States congressmen were indicted for alleged illegal practices in trying to secure the establishment of a forest reserve to cover some of their holdings.[37] Without doubt many of the petitions were made by persons sincerely interested in timber conservation, but many were made by persons who only sought means of turning worthless lands into valuable holdings.

The evils arising under the Forest Lieu Act were very quickly seen by government officials. In 1898, the Secretary of the Interior reported that the lieu selection provision needed modification;[38] and the next year, the commissioner called for changes in the law to prevent the "improvident, reckless, and unjust selection of the public lands."[39] Almost every annual report of the secretary, and of the commissioner, for several years thereafter, called attention to abuses under the law, and recommended its modification or repeal. In 1904, the Public Lands Commission strongly recommended repeal of the law.[40]

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[35] *Report*, Land Office, 1901, 113: *Stat.* 30, 1780.

[36] *Report*, Land Office, 1901, 114, 117.

[37] *Report*, Sec. of Int., 1906, 30. Puter says it was a gang of timber thieves that worked hardest for the creation of this reserve—the Blue Mountains Forest Reserve in Oregon—and that one man was hired to make false signatures to the petition for the creation of the reserve. (Puter and Stevens, "Looters of the Public Domain," 347-350.)

[38] *Report*, Sec. of Int., p. XVI.

Some men in Congress also quickly recognized the evils of the Forest Lieu Act, and, the next year after its passage, in the act extending the provisions of the Homestead Law to Alaska, specific provision was made that no indemnity or lieu land selections should be made in Alaska—a provision which was reaffirmed five years later. Subsequent statutes regarding the selection of lieu lands were made more and more strict and exacting.[41]

EFFORTS TO REPEAL THE FOREST LIEU ACT

Efforts were soon made in Congress to modify or repeal the Forest Lieu Act itself, and in these efforts western men played the leading part. In 1900, the Senate unanimously agreed to a resolution submitted by Stewart of Nevada, asking the Secretary of the Interior what legislation was necessary to protect the government from the evils of the lieu land selections.[42] In the same Congress, several bills were introduced into the House, providing for the amendment or repeal of the act, and one was reported favorably by the Committee on Public Lands.[43] In May, 1900, Senator Pettigrew offered an amendment to the Sundry Civil Bill, providing that no railroad lands within a forest reserve should be exchanged until all such lands had been examined. This amendment was agreed to in the Senate, but the conference committee substituted another amendment, limiting lieu selections to *surveyed* lands, with a proviso that this should not take effect until October 1, 1900. This amendment was accepted by both houses and became law.[44]

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[39] *Report*, Land Office, 1899, 114.

[40] S. Doc. 189; 58 Cong. 3 sess., XV.

[41] *Stat.* 30, 409; 32, 1028; 35, 626, 627; 36, 562, 563, 960, 961; 37, 201, 241, 323, 324.

[42] *Cong. Rec.*, Feb. 5, 1900, 1400.

[43] H. R. 5267, H. R. 9668, H. R. 10739, H. R. 11841, H. Report 1700; 56 Cong. 1 sess.

[44] *Cong. Rec.*, May 31, 1900, 6289, 6290; June 4, 6558; June 6, 6891: *Stat.* 31, 614.

The limitation of selections to surveyed lands would have eliminated one of the worst features of the Forest Lieu Act, had it taken effect immediately, but since it did not take effect for nearly four months, there was still time for most of the selections to be made on unsurveyed lands as before. Just what interests in the conference committee demanded this concession, it is impossible to say. McRae stated that the House Committee on Public Lands wanted it, and that he thought it was impossible to get any legislation without this extension of time,[45] but the question remains as to what considerations or what influences led that committee to demand such a concession. There was no justification for such an extension of time, for it would have been no hardship to restrict selections to surveyed lands immediately. That had been the uniform practice of the government in dealing with scrip. The conference committee which was responsible for this extension of time was composed of Senators Allison of Iowa, Hale of Maine, and Cockrell of Missouri, and Representatives Joe Cannon, Moody of Massachusetts, and McRae of Arkansas.

The amendment of June 6, 1900, having thus failed to provide adequate relief, efforts were immediately resumed in Congress to secure further modification of the Forest Lieu Act. Various proposals were made. Representative Fordney of Michigan wished either to repeal all lieu selection provisions, or to provide that the lands selected should be approximately equal in value to those relinquished. Fordney later claimed that he once called the attention of the Commissioner of the Land Office, Binger Hermann, and of the Secretary of the Interior to the iniquitous effects of the Forest Lieu Act, and, with their coöperation, brought a measure before the House Committee on Public Lands requiring that the lands should be of equal value, but all of the committee except himself voted against it.[46]

Mondell would merely have prohibited the selection of timber lands,[47] while Representative Tongue of Oregon, and later his successor, Binger Hermann, advocated a limitation on the value of the land which might be selected.[48] Representative Jones and Senator Heyburn also favored such a limitation; and in 1904, Heyburn introduced a joint resolution directing the stay of all proceedings pending upon selections of even numbered sections by railroad companies.[49] No legislation resulted from any of these proposals.

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[45] *Cong. Rec.*, June 6, 1900, 6822. Senator Carter seemed to be opposed to the repeal of the Forest Lieu Act, for reasons which do not sound the depths of sincerity. (*Cong. Rec.*, May 31, 6289.)

[46] H. R. 7456, H. R. 6523; 57 Cong. 1 sess.: *Cong. Rec.*, Apr. 18, 1916, 6395.

[47] H. R. 4866; 58 Cong. 1 sess.: H. R. 14052; 58 Cong. 2 sess.

In the fifty-eighth Congress, Mondell continued his efforts, and finally, in 1905, secured a law repealing the Forest Lieu Act.[50] It had served as the means whereby individuals and corporations exchanged about 3,000,000 acres of land, much of it waste and cut-over land within the forest reserves, for valuable government land outside.

LIEU SELECTION IN THE SAN FRANCISCO MOUNTAINS FOREST RESERVE

Meantime, in the San Francisco Mountains Forest Reserve, in Arizona, the checkerboard style of reservation was found to involve very serious difficulties of administration, for the owners of the alternate sections constantly trespassed upon the government sections, either willfully or because the boundaries were not well marked. The protection of these scattered patches of government land was very difficult and expensive; and Secretary Hitchcock, following the advice of the forest supervisor and the forest superintendent, entered into contracts for the exchange of some of the government sections elsewhere, for private sections in the reserve, in order to consolidate the government holdings.

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[48] H. R. 9507; 57 Cong. 1 sess.: H. R. 2900; 58 Cong. 1 sess. The introduction of such a bill by Binger Hermann at this time seems a little strange, and its exact significance is difficult to ascertain. Oregon had been for some time the scene of notorious frauds under various public lands laws, including the Forest Lieu Act, and, for alleged complicity in these frauds, Hermann had, in February, 1903, been removed from the office of Commissioner of the Land Office by President Roosevelt. Hermann went back to Oregon, and, within six months of his dismissal, was elected to Congress. Whether in introducing this bill, he was sincerely interested in improving the Forest Lieu Act, or whether he was merely playing to the gallery, is a somewhat delicate question. (*Reports*, Sec. of Int., 1903, 12; 1904, 4; 1905, 27. See also Compilation of Public Timber Laws, 1903, 48, 49.)

[49] S. Res. 30; 58 Cong. 2 sess.

[50] H. R. 14622, H. Report 2233; 58 Cong. 2 sess.: S. Report 3332; 58 Cong. 3 sess.: *Cong. Rec.*, Apr. 25, 1904, 5586; Mar. 4, 1905, 4034-4037. For later attempts to secure lieu selection privileges, see H. R. 10584; 61 Cong. 1 sess.: H. R. 16339; 61 Cong. 2 sess.: S. 10791; 61 Cong. 3 sess.: S. 245, H. R. 2875, H. R. 4699, H. R. 11378; 62 Cong. 1 sess.: S. 5068, S. 5875, H. R. 16827, H. R. 17248, H. R. 19344, H. R. 21361, H. R. 21366, H. R. 25738; 62 Cong. 2 sess.

There were several large private landholders in this reserve: the Santa Fé Pacific Railroad Company, the owner of 507,000 acres; the Aztec Land and Cattle Company, with 132,000 acres; the Perrin brothers, with 134,000 acres; William F. Baker, owner of 79,000 acres; the Saginaw and Manistee Lumber Company, with 40,000 acres; and others with smaller amounts. The Secretary of the Interior had already entered into contracts for the exchange of a large amount of timber land when the Forest Lieu Act was repealed; but a clause in the repealing act provided that "the validity of contracts entered into by the Secretary of the Interior" prior to the passage of the act should not be impaired.

It now appears that the exchanges made in connection with these reserves were nothing that the government could be very proud of. Undoubtedly private owners generally got the best end of these contracts, and some of them even violated certain terms of their agreement; but it was hardly to be expected that the government should bargain with private parties and not get cheated more or less.

At any rate, there is no evidence to justify imputations often made, that Secretary Hitchcock was inspired by any improper motives in his conduct of the matter, or even that he was unduly careless. The reserve had been established on the petitions of the legislature of Arizona, the Phoenix Chamber of Commerce, the Arizona Water Company, and of private citizens of the state, on the theory that it would conserve the water flow for extensive irrigation systems below. The checkerboard system of reserves had been adopted in a sincere effort to avoid the evils of lieu selections, and when that form of reserve proved impractical, the secretary tried to get it into better shape. There is evidence that Secretary Hitchcock used reasonable care in the matter. The difficulty was with the Forest Lieu Act itself.[51]

LIEU SELECTION AND THE MOUNT RANIER NATIONAL PARK

The Northern Pacific Railroad was given lieu selection privileges, not only under the general Forest Lieu Act of 1897, but also under a special provision in the act providing for the creation of the Mount Ranier National Park in 1899. The creation of this park has been the occasion of so much discussion, so much criticism of the forest reserves and the forest reserve policy, so much questioning of motives, and of the integrity of certain public men, that it merits a bit of close scrutiny.

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[51] [illegible] of Int., 1905, 327: H. Doc. 613; 59 Cong. 1 sess.: S. Doc. 612; 61 Co[illegible]ong. *Rec.*, Mar. 4, 1905, 4035; Mar. 14, 1914, 4866, 4867; Jan. 22, 1915, [illegible] Decisions," 33, 558.

As early as January, 1896, Representative Doolittle of Washington introduced a bill to set aside a national park inclosing Mount Ranier, and it passed both houses, but was not signed by President Cleveland—according to statements made later in Congress, was pocket-vetoed. In March of the following year, Senator Wilson, also of Washington, introduced a similar measure, which brought no results; but a bill introduced by him in December, 1897, and favorably reported by him from the Senate committee, finally passed both houses, and was signed by President McKinley.

The provisions of this act which caused particular trouble were those which related to lieu selections. The Northern Pacific Railroad was permitted to relinquish any of its lands within the park, or within the Pacific Forest Reserve, and to select *surveyed* or *unsurveyed* land in any state into or through which its lines extended. The act was too generous to the railroad in several ways. In the first place, it gave the railroad the right to select *surveyed* as well as *unsurveyed* lands. Thus it explicitly provided what the Forest Lieu Act itself had only left to implication. In the second place, it provided that the railroad might select these lands in any state into or through which its lines extended. This was interpreted by the Secretary of the Interior to give the right to select *anywhere* in those states, without restriction to its indemnity limits. The Northern Pacific had only a few miles of road in Oregon, but under this provision, it was enabled to select lieu lands in the wonderfully rich timber regions of Oregon for snow-covered mountainsides and other comparatively worthless mountain lands. A significant decision of the Secretary of the Interior some years later, was on the question as to whether some 17,000 acres of glaciers should be accepted as bases for lieu selections.

In one of the committee reports favoring the Wilson bill, the statement was made that the railroad lands in the park were mostly heavily timbered, and some of them were, but the Northern P[illegible]s glad to trade 450,000 acres off for better lands elsewher[illegible]0,000 acres of the latter being afterward sold to the Weyer[illegible] was once stated in Congress that the Northern Pacific relinquished its 450,000 acres within three days after the act creating the park was signed.

The establishment of this park had been recommended by a committee of the National Academy of Sciences, and there is no doubt that many people in Washington wanted the park for perfectly good reasons. Also, at the time Senator Wilson introduced his measure, the general Forest Lieu Act had not been in force long enough so that the evil results of lieu selections were generally recognized. Nevertheless, the outrageously generous provisions of the act suggest a possibility that its provisions were drawn under the careful supervision of friends or agents of the Northern Pacific.[52]

It can now be easily understood how the Forest Lieu Act occasioned much hostility in the West, not only toward the land grant railroads, which profited most under the act, but also toward the forest reserves, which made lieu selections possible. The creation of more reserves meant more lieu selections for the railroads, and this meant the appropriation of good timber lands outside the reserves. In this way, the creation of new forest reserves, while it favored the protection of timber within the boundaries established, assisted in the destruction of timber outside. The West had a just grievance; although it is to be remembered that it was a western man, Senator Pettigrew, who was partly responsible for the Forest Lieu Act, and another western man, Senator Wilson, who was responsible for the gross abuses arising out of the creation of the Mount Ranier Park.[53]

THE OREGON TIMBER LAND FRAUDS

Any discussion of the Forest Lieu Act would be incomplete without some account of the Oregon timber land frauds in the early years of the twentieth century—the most extensive and notorious frauds in the recent history of the public lands. These frauds were perpetrated under various public land laws, but perhaps none of the laws were used so much as the Forest Lieu Act.

[52] *Stat.* 30, 993: "Lumber Industry," I, 238, 239: Puter and Stevens, "Looters of the Public Domain," Ch. XXIV: *Cong. Rec.*, Mar. 14, 1914, 4865; Jan. 22, 1915, 2146-2148: H. R. 4058; 54 Cong. 1 sess.: S. 349; 55 Cong. 1 sess.: S. 2552; 55 Cong. 2 sess.: "Land Decisions," 33, 634; 34, 88; 37, 70.

[53] *Proceedings*, Society of Am. Foresters, Nov., 1905, 70.

For a great many years certain districts of the coast states were infested with speculators, agents of timber companies and of the railroads, hunting for scrip, land warrants, or for hirelings to enter lands in their interest. Government officials of all kinds, and apparently of all degrees of dignity were corrupted—land officers, attorneys, surveyors, inspectors, and men higher up.[54] Hitchcock learned something of this state of affairs soon after his initiation as Secretary of the Interior, and, after looking carefully into the matter, began "housecleaning" late in the year 1902. One of his first moves was the removal of Commissioner Binger Hermann from the Land Office. At about the same time he secured indictments against F. A. Hyde, John A. Benson, and several others for conspiracy to defraud the government of large areas of its public lands.[55] Some of these men had been in the business of stealing from the government for over thirty years, and one had been implicated eighteen years before in land survey frauds involving over $1,000,000.[56]

The scheme of Hyde, Benson, and their gang in these later years involved an attempt to steal several hundred thousand acres of land under the Forest Lieu Act, by first securing title to state school lands within the forest reserves in California and Oregon, and then making lieu selections on the basis of these school lands. It appears that they had some kind of a "subterranean connection" with officials of the government, so that they got advance information as to the creation of new forest reserves, and on receipt of such information, they got possession of state lands, largely worthless lands, and used it as a base for selecting valuable lands elsewhere. When Mr. Kingsbury took the office of surveyor-general of California in January, 1907, he discovered that indemnity or lieu lands were almost entirely controlled by Hyde; and nearly 40,000 acres had been patented before the fraud was discovered. Secretary Hitchcock immediately stopped the issue of patents upon all selections and entries involved, and ordered the arrest of the men implicated.[57]

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[54] For an interesting account of conditions here, see Puter and Stevens, "Looters of the Public Domain."

[55] *Report*, Sec. of Int., 1904, 21.

[56] *Report*, Sec. of Int., 1887, 332.

[57] *Report*, Sec. of Int., 1904, 22 et seq.

Benson was said to have accumulated a large fortune in his career, and, at any rate, it seems that some member of this party had abundant means, for the heavy bonds required were promptly furnished, and every step of the ensuing case was fought stubbornly. The government wanted the defendants removed to the District of Columbia for trial, but the motion for removal was carried to the Supreme Court of the United States, where removal was ordered only after a year's delay.[58] This case was finally terminated in 1908 by the conviction of Hyde and one of the other men. The investigation led also to the dismissal of four employees in the Land Office, and several employees in the Bureau of Forestry.[59]

More fruitful of results than the prosecution of Benson and his party, was the indictment, shortly afterward, of S. A. D. Puter, United States Commissioner Marie Ware, and several others—two of them women.[60] Detective William J. Burns was given charge of the secret service work,[61] and Francis J. Heney took charge of the prosecution, United States Attorney John S. Hall being removed and afterward convicted of complicity in the frauds. Confessions were secured from several of the persons, notably from Puter, confessions which involved men occupying high offices.

According to these confessions, hundreds of fraudulent entries and final proofs were made before this dishonest commissioner. It was part of the scheme that the United States attorney should allay any suspicion that might be aroused at Washington, or, if necessary, bring suit in such a way as to make failure inevitable;[62] and when certain claims required particular dispatch, one of the congressmen or senators at Washington was to be bribed to see the Commissioner of the Land Office, Binger Hermann, and secure desired concessions. In this connection, Senator Mitchell was specifically mentioned, Puter alleging that he had paid him $2000 to secure the issue of certain patents.[63]

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[58] *Report*, Sec. of Int., 1904, 23.

[59] *Report*, Land Office; 1908, 25-27; 1915, 34: H. Report 566; 62 Cong. 2 sess.: H. Report 1367; 62 Cong. 3 sess.: *Cong. Rec.*, Mar. 3, 1913, 4823-4825: *Outlook*, Nov. 23, 1912, 665: "Land Decisions," 28, 285; 31, 28; 33, 639; 37, 164; 40, 219, 284; 43, 176.

[60] *Report*, Sec. of Int., 1904, 24.

[61] *Report*, Sec. of Int., 1903, 12-14.

[62] Puter and Stevens, "Looters of the Public Domain," 136-140.

[63] *Ibid.*, 64, 65.

On January 17, 1905, Senator Mitchell rose in the Senate to a question of personal privilege, and made an eloquent denial of all the charges against him.[64] "I assert in the most positive and unqualified manner," he said, "that each and every one of these charges, in so far as they relate to or involve me, are absolutely, unqualifiedly and atrociously false, and I here and now indignantly and defiantly denounce their authors, and each and every one of them, and brand them publicly as malicious and atrocious liars. I challenge them to produce any evidence, other than that of condemned thieves, forgers and perjurers, to sustain any such charges." The gray-headed senator seemed to command a great deal of sympathy at the time, for the presiding officer threatened to clear out the galleries before the applause could be stopped. Within six months, however, Senator Mitchell was convicted and sentenced to six months' imprisonment and a fine of $1000, after his law partner, Judge Tanner, had perjured himself in an attempt to shield him.[65]

Three of the four men representing Oregon at Washington were indicted in connection with these frauds, and the other one, Senator Fulton, would have been indicted, it is said, had not the statute of limitations run against his offense.[66] Two of them, Senator Mitchell and Representative J. N. Williamson, were convicted, the latter after three trials, but both men appealed.[67] Mitchell died pending appeal, but Williamson was granted a new trial by the Supreme Court of the United States, on a question of constitutionality unconnected with the question of his guilt,[68] and on May 2, 1913, the case against him was dismissed by the Attorney-General. The case against Binger Hermann was also dismissed in 1910.[69]

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[64] *Cong. Rec.*, Jan. 17, 1905, 959.

[65] *Report*, Sec. of Int., 1906, 30. Senator Mitchell's conviction was accomplished only after one of the finest chains of circumstantial evidence was forged about him. Judge Tanner, in Mitchell's defense, produced a contract between himself and Mitchell bearing date of 1901, in which it was agreed that Mitchell should have his salary, get one half of the proceeds of law cases, but that he would accept no fees for appearing before the departments in legitimate matters affecting his constituents. The watermark on the paper on which this contract was written was "Edinample." The Government showed that no sample of this paper had appeared on the Pacific coast until 1903. It also showed by the color of the ribbon of the typewriter on which it had been written that it was not in existence before 1903. Furthermore, the contract had three words misspelled—"legitimate," "salary," and "constituents." When Tanner's son was asked to write a sentence containing these words he made the same mistakes. Then he broke down and admitted that he had "faked" the contract of 1903, and said that department fees, instead of being the property of his father, were the property of Senator Mitchell. (*Outlook*, Feb. 23, 1907, 427 et seq.: Puter and Stevens, "Looters of the Public Domain," Ch. XIII.)

[66] *Report*, Sec. of Int., 1905, 27: *Outlook*, Feb. 23, 1907, 427 et seq.: *Collier's Weekly*, Apr. 4, 1908, 13. Regarding Senator Fulton, the following excerpt from Roosevelt's "Autobiography" seems worth quoting: "The other case was that of Senator Fulton of Oregon. Through Francis Heney I was prosecuting men who

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were implicated in a vast network of conspiracy against the law in connection with the theft of public land in Oregon. I had been acting on Senator Fulton's recommendations for office in the usual manner. Heney had been insisting that Fulton was in league with the men we were prosecuting, and that he had recommended unfit men. Fulton had been protesting against my following Heney's advice, particularly as regards appointing Judge Wolverton as United States Judge. Finally Heney laid before me a report which convinced me of the truth of his statements. I then wrote to Fulton as follows on November 20, 1905: 'My dear Senator Fulton: I inclose you herewith a copy of the report made to me by Mr. Heney. I have seen the originals of the letters from you and Senator Mitchell quoted therein. I do not at this time desire to discuss the report itself, which of course I must submit to the Attorney-General. But I have been obliged to reach the painful conclusion that your own letters as therein quoted tend to show that you recommended for the position of District Attorney B——, when you had good reason to believe that he had himself been guilty of fraudulent conduct; that you recommended C—— for the same position simply because it was for B——'s interest that he should be so recommended, and, as there is reason to believe, because he had agreed to divide the fees with B—— if he were appointed; and that you finally recommended the reappointment of H—— with the knowledge that if H—— were appointed he would abstain from prosecuting B—— for criminal misconduct, this being why B—— advocated H——'s claim for reappointment. If you care to make any statement in the matter, I shall of course be glad to hear it. . . .' Senator Fulton gave no explanation. I therefore ceased to consult him about appointments under the Department of Justice and the Interior, the departments in which the crookedness had occurred." (Roosevelt, "Autobiography," 391, 440.)

[67] 153 Fed. Rep., 46: 199 U. S., 616.

[68] 28 Sup. Ct. Rep., 165, 177: 207 U. S., 425.

[69] The question of the guilt or innocence of Binger Hermann has never been judicially cleared up. The dismissal of the suit against him is of course not conclusive evidence in his favor. The government had first indicted him for complicity in the land frauds, but, being unable to convict, had prosecuted him on the charge of having destroyed certain records of the Land Office. Secretary Hitchcock had apparently notified him of his dismissal but had given him sufficient time to destroy some of the letters in the office before leaving. It is certain that he destroyed some of the letters, but he claimed that only those of a personal nature had been destroyed. This was regular enough, for it is the custom of the Commissioners of the Land Office to keep copies of all letters that they write, and on leaving office, to destroy personal letters. The government was unable to prove that Hermann had destroyed any of the records of the Land Office, and no one but Hermann himself knows what was in the letters he destroyed. The writer

This discussion of the Forest Lieu Act will help to explain the events of 1907. Sufficient western hostility would have been aroused by the fact that the act operated to destroy timber on the public domain for the benefit of a few land grant railroads, some of them already, by reason of various illegal and arbitrary practices, very unpopular in the West. This was not, however, the only way in which the act aroused western hostility, for it occasioned very unpleasant relations between the Department of the Interior and certain western congressmen. Even men who were in no way implicated in those or in other frauds, felt a sympathy for the ones who were caught, for unquestionably such frauds had been too common in some of the public land states to be viewed seriously. Also, it is not probable that the government convicted, or even indicted, all of the politicians who were guilty of land frauds. It is doubtless significant that it was Senator Fulton—the only one of the Oregon delegation not indicted in 1903—who was most active in the anti-conservation attack of 1907.

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INEFFICIENCY OF THE EARLY FOREST ADMINISTRATION

For reasons just pointed out, there would have been sufficient hostility toward the forest reserves, even if the forest administration had been entirely above criticism in all respects, and it was not above just criticism. During the first few years of forest reserve administration—previous to 1905—the force included some very poor material. The superintendents and supervisors were often appointed through political influence—lawyers, editors, postmasters, doctors, real estate dealers, etc. The ranger force was worse. Ward politicians, bartenders, and loafers formed a considerable share of the force. Low salaries—sixty dollars a month for a man and horse—uncertainty of tenure, and impossibility of promotion kept good men from entering the ser-

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cannot but feel that his stand on forestry matters in Congress was generally conscientious enough. He was of course an astute politician, and it is said by employees in the Land Office that while he was commissioner he used his office a great deal in paying political debts, by giving information, and by advancing cases out of their regular order, etc.—acts not unlawful perhaps, although often unfair to the applicants who did not "stand in." (*Cong. Rec.*, Oct. 10, 1893, 2374; Oct. 12, 1893, 2431; Dec. 7, 1894, 112; Dec. 17, 1894, 366; Apr. 18, 1916, 6395. See also various references to Hermann in Puter and Stevens, "Looters of the Public Domain," particularly pages 59-66.)

vice. They must fight trespass of all kinds, investigate frauds, report on the location of settlements, enforce the state game laws, scale timber, and supervise cutting, and, above all, guard against fire. Able and competent men were needed; and many of the men employed merely brought discredit upon the administration and upon the forest reserve policy.

Early in President Roosevelt's administration, Secretary of the Interior Hitchcock gave the forest administration an overhauling, and in December, 1904, Roosevelt signed an order placing the administration under civil service; but the force which was turned over to the Forest Service in 1905, when the reserves were transferred to the Department of Agriculture, was not a very competent body of men. Immediately after the transfer, Pinchot set about to winnow out the incapables, and within two or three years the force was greatly improved; but the West did not immediately forget the previous state of affairs. Furthermore, the efficiency of the new administration was itself a reason for hostility on the part of a certain element in the West. The officials who lost their positions, the politicians who lost their influence, the various classes which had profited from the earlier lax administration, felt no great friendship for the new régime.[70]

OTHER CAUSES OF WESTERN HOSTILITY

Still other factors contributed to the hostility toward the reserves. The reservation of lands led to a curtailment of Land Office advertising, and this brought some of the small newspapers into opposition. The reservation policy also interfered with some of the larger business interests, and this affected the larger papers, whose attitude was generally determined by the interests controlling their management. The reservation of lands also cut into the profits of professional land locators—those who made a business of entering lands in the interest of timber companies, cattle companies, and speculators generally.

One of the causes for the hostility of western politicians had little to do with the western people themselves. Some of the western senators and representatives resented the policy of the President in establishing

[70] *Forestry and Irrigation*, Apr., 1906, 161: *Report*, Land Office, 1908, 27: *Proceedings*, Society of Am. Foresters, Nov., 1905, 43-50: *Cong. Rec.*, Feb. 26, 1909, 3239, 3240; Mar. 12, 1914, 4750.

reserves without consulting them first. Roosevelt of course saw the possibility that advance information regarding the establishment of reserves might be used improperly, and for that reason did not consult the western politicians as much as politicians like to be consulted. Heyburn and others complained of this apparent "distrust" of the western men.[71]

AN EXPRESSION OF THE WESTERN ATTITUDE

It will perhaps be only fair to point out certain elements of sincerity and justice in the western attitude of hostility; and this cannot be done better than by quoting from a western writer in the *North American Review* of November, 1903: "Upon the proclamation of a forest reserve, which cancels all rights of further entry thereupon under the general land laws, land holders and mine owners who reside in the reserved region suddenly find themselves in a new and unexpected environment. They are bound hand and foot to strange general rules and special orders, under formal authority of the Secretary of the Interior, but administered primarily by bureau and division officers of the Department of the Interior through local supervisory officers of several grades, some of whom may be non-resident. No longer a free agent, as an American citizen should be, the settler is called upon to submit his avocation and daily acts to the control of personal authority, exercised without form or force of law. . . . In a contest with authority, the settler's only recourse is to a United States District Court, and in most of the Western States such recourse can be had only at a single point, often remote from the settler's residence.

"True, the settler may surrender possession, including all increment of value in buildings, irrigation, fences, or other improvements, in exchange for 'lieu selections' of unimproved vacant lands in still unreserved parts of the public domain, wherein desirable selections have come to be few and far between. Whatever the increment, the rate of value per acre of lieu selections can rarely exceed the current negotiable value of Land Office scrip. Accretion to local possessions is no longer practicable. One of the greatest incentives to exertion is therefore hopelessly removed. Thousands of worthy settlers within the borders of territory summarily set aside for forest reserves at a stroke of the pen, have elected to abandon an environment which has suddenly become intolerable, and to surrender homes, however well-established or even cherished they may have become.

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[71] S. Doc. 68; 55 Cong. 1 sess.

"Grazing of sheep is prohibited in most of the reserves. For want of upland pasturage and water for their flocks in dry seasons, resident and near-by wool growers are suddenly confronted with complete subversion of their occupation. Grazing rights that are preserved to other stockmen are restricted within designated limits for a given number of live stock, which must be counted in and out of reserves on given dates. Timber may be cut for construction or for fuel only by measure, also within prescribed limits. . . . The mine owner is cut off from necessary uses for timber, except in small doles, adequate only to purposes of the prospector. Further supplies are far from being assured, even after much circumlocution and suspense in the process of application for them. Timber privileges which are granted within limits to individuals without cost, are explicitly denied to corporations, legally paradoxical as this may be."

As Mondell once pointed out, much of the early complaint regarding the forest reserves arose from the hurry with which the exterior boundaries of the first reserves were established. Since these reserves had never been carefully surveyed, it was inevitable that there should be mistakes in marking the boundaries, mistakes which would sometimes cause hardship to settlers and others. This does not imply that the reserves should not have been established, nor that they should not have been established so early, for if they were to be set aside at all, they had to be set aside while the country was still new and relatively unknown, before private interests had taken up the most valuable lands.

EFFORTS TO OVERTURN THE RESERVATION POLICY

Measures designed to reverse the entire policy of forest reservation were almost constantly before Congress. In 1900, Representative Wilson of Idaho introduced a bill prohibiting the establishment or extension of forest reserves in Idaho except by act of Congress. In the same session, Jones of Washington introduced two bills into the House, one prohibiting the establishment of reserves in Washington, and the other prohibiting their establishment in all states. Both were favorably reported by the Committee on Public Lands, but neither received any further consideration. In the next session of Congress, an attempt was made in the Senate Committee on Appropriations to slip an amendment into the Sundry Civil Bill eliminating the word "hereafter," so that no funds would be available for the protection of *new* reserves. This amendment, however, failed in the conference committee.[72]

In the next session of Congress, Jones renewed his efforts to stop the creation of reserves, but without success. About the same time, the House Committee on Public Lands tried to secure a law providing that forest reserves should be created or enlarged only on the approval of the governor of the state concerned, but this also failed.[73]

SENATOR HEYBURN AND THE RESERVES

In 1903, W. B. Heyburn succeeded Heitfeld as senator from Idaho, and Heyburn had not been in Congress a year before he evinced the rancorous hatred of the reserves which characterized his entire political career. Heyburn's hostility to the reserves, a hostility which he displayed at every opportunity, was largely a personal matter. Shortly after he entered Congress, he began to criticise the Forest Service, and to oppose the creation of new reserves in Idaho. He carried this opposition so far that Pinchot decided to strike back by exposing Heyburn's record on the forest reserve question. The result was the publication, in 1905, of *Forest Bulletin* 67, in which was printed the complete correspondence of Heyburn, Pinchot, President Roosevelt, Senator Dubois—the other Idaho senator—and several others, on the question of the creation of reserves in Idaho. This bulletin showed clearly that Heyburn was not in good standing with President Roosevelt, and probably Pinchot thought it would make Heyburn some trouble at home, for Roosevelt was still popular with the people of the West. Perhaps Pinchot thought this move would silence Heyburn's criticism; but certainly it had no such effect, for Heyburn became only more violent in his opposition to the reserves. He was ever afterward the archenemy of the reservation policy.

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[72] H. R. 7332, H. R. 9599, H. R. 11357, H. Reports 1985, 1986; 56 Cong. 1 sess.: *Cong. Rec.*, Feb. 28, 1901, 3225; Mar. 2, 1901, 3570.

[73] H. R. 171, H. R. 172, H. Report 968; 57 Cong. 1 sess.

Early in Roosevelt's second administration, Heyburn brought forward a bill to reimburse the states and territories for school lands included in forest reserves;[74] but, as he frankly admitted, his purpose was not so much to get cash for the school lands as to make an opportunity for an attack upon the reserves.[75] The debates on this bill, while not fruitful of immediate results, are of considerable interest because they show a conservation attitude, even on the part of some of the western men. Teller of course took the usual stand, but Heyburn's colleague Dubois stoutly defended the reserves. "In regard to this proposition I differ radically and totally with my colleague," said Dubois. "We want to preserve these forest lands for the present population of Idaho and for future generations. . . . The present administration may, and doubtless does, make some mistakes in the numerous details of carrying on this great work, but they are so few and insignificant as compared with the great benefit which the policy confers on our whole people, that they are entitled to the support of our western representatives at least."[76]

Other western men—Smoot of Utah, Newlands of Nevada, and Warren of Wyoming—showed at least a lack of sympathy with Heyburn's attack.[77] After Heyburn had berated the Forest Service at some length, Newlands begged permission to "ask the senator, in view of the fact that Idaho's present population is 300,000 and that she some day before very long will probably have a population of a million and a half, whether he regards the present reservation of one fifth of the entire area for purposes of the future as unwise." In a somewhat similar vein, Smoot asked if it were not true that "many times miners, or alleged miners have gone upon forest reserves in Idaho and other states and simply located upon a piece of land, calling it a mineral claim, when there was no other object on earth than to get the timber within the claim, and when there was no mineral whatever there." Heyburn pompously declared that there was "so small a percentage of fact upon which to base a question of that kind" that it was "not worthy of being taken into consideration"; but most of the members of Congress were evidently considering it, nevertheless.

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[74] S. 1661.

[75] *Cong. Rec.*, Jan. 29, 1906, 1689.

[76] *Ibid.*, 1691-1693. For a careful discussion of the attitude of Heyburn and of Dubois, see *Forest Bul.* 67, 1905, pp. 40 et seq. As indicated there, Dubois sometimes criticised Heyburn most severely for his "disregard of facts," in his attacks on the reserves.

[77] *Cong. Rec.*, Jan. 29, 1906, 1677-1695.

Heyburn's bill was vigorously assailed by Beveridge of Indiana, Nelson of Minnesota, and Dolliver of Iowa, and, lacking the united support of the West, it never passed the Senate. Later in the same session of Congress, Heyburn introduced another bill, to prohibit the creation of forest reserves in Idaho, but it was never reported.[78]

THE ANTI-CONSERVATION ATTACK OF 1907

Attention has now been directed to the difficulties encountered in connection with grazing in the forest reserves, the very rapid increase in the number of reserves, the vigorous and aggressive policy of the Roosevelt administration, the abuses under the Forest Lieu Act, the incompetency of the early forest officers, and other causes of western hostility. Consideration of these matters opens the way to a better understanding of the anti-conservation attack of 1907.

In 1907, just as in 1897, and at various other times, the anti-conservation hostility came to a head in connection with the debates on an appropriation bill. The House Committee on Agriculture had inserted an amendment to the Agricultural Appropriation Bill, permitting the Secretary of Agriculture to divide up the national forests into such administrative units as might seem wise, but Tawney of Minnesota was opposed to allowing the secretary so much discretion, and he raised the point of order on the amendment.[79] Tawney afterward withdrew his point of order, but Mondell renewed it and was sustained.

Mondell's opposition was apparently prompted by the fact that the Forest Service followed the policy of selling timber at regular market prices; although as a matter of fact, the Forest Service was required by law to follow that policy. Mondell claimed that the government, with a monopoly of the timber supply in some districts of the West, was raising prices even above those of the Pacific "lumber combines." "Each inspector who visits our reservation boosts the price a little higher," he said, "until we have a monopoly established, by the side of which the alleged lumber monopoly on the Pacific coast is a mild-mannered and philanthropic organization."[80]

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[78] S. 4470.

[79] *Cong. Rec.*, Jan. 29, 1907, pp. 1900, 1901.

In spite of the opposition of Mondell, Tawney, Fitzgerald of New York, Smith of California, and others—by no means all western men—Wadsworth of New York succeeded in getting the appropriation bill through the House without serious alteration, but in the Senate a more decided hostility was immediately manifest. A proposed increase in Pinchot's salary was promptly assailed by Senator Fulton; but the entire Bureau of Forestry was presently brought in for castigation. "The truth is," declared Senator Fulton, "this Bureau is composed of dreamers and theorists, but beyond and outside the domain of their theories and their dreams is the everyday, busy, bustling, throbbing world of human endeavor, where real men are at work producing substantial results. . . . While these chiefs of the Bureau of Forestry sit within their marble halls and theorize and dream of waters conserved, forests and streams protected and preserved throughout the ages and the ages, the lowly pioneer is climbing the mountain side where he will erect his humble cabin, and within the shadow of the whispering pines and the lofty firs of the western forest engage in the laborious work of carving out for himself and his loved ones a home and a dwelling-place."[81] Senator Patterson of Colorado complained likewise, although in somewhat less eloquent vein, of the "little, petty prosecutions" instituted by government agents.

Secretary of the Interior Ethan Allen Hitchcock was the main target of western vituperation. "I myself believe, and I say here now," announced Senator Fulton, "that the responsibility [for the abuses under the Forest Lieu Act] did rest upon, and the consequences must be born by, the Secretary of the Interior." Senator Carter was equally energetic in his denunciation of Secretary Hitchcock.

Fulton and Carter were not entirely fair in their attacks upon the Secretary of the Interior. In the first place, they asserted that a proper construction of the Forest Lieu Act entitled only settlers to exchange their lands. It is true that this construction might have been given, and as a matter of fact was given by the Commissioner of the Land Office, previous to the administration of Hitchcock; but there was some logic in Hitchcock's interpretation. The act gave lieu selection privileges to any "settler or owner of a tract" within a forest reserve, and certainly the term "owner" might be construed to include a railroad owner; indeed, that seems the most obvious construction. Had Congress, in passing the act, wished its provisions to apply only to settlers, it seems that it would have used the term "settler," and let it go at that, without adding the further alternative, "or owner of a tract." In the second place, Fulton and Carter intimated that Hitchcock was the only secretary who had included railroad lands within forest reserve limits.[82] Carter said that the policy of Secretary Bliss, preceding Hitchcock, had been to draw the boundaries of the reserves in such fashion as to leave out the odd numbered sections—the railroad lands. As a matter of fact, the proclamation of August 17, 1898, establishing the San Francisco Mountains Forest Reserve,[83] was the only one issued during the incumbency of Bliss in which that particular scheme had been used, and even there it had not worked successfully. The abuses under the Forest Lieu Act had arisen before Hitchcock became secretary.[84]

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[80] *Cong. Rec.*, Jan. 29, 1907, 1906. For an account of an attack upon the Forest Service in 1913 because of its policy of selling timber at market prices, see "Lumber Industry," IV, 62, 63.

[81] *Cong. Rec.*, Feb. 18, 1907, 3183-3206.

The defense of the forest reserves was taken up by men from all sections of the country. Senator Dolliver of Iowa thought the criticism directed against the Forest Service was "especially to be deplored." "Here in the Senate and in the other House of Congress," he said, "we find a petulant stream of criticism directed at the integrity of his [Hitchcock's] motives, and the wisdom with which he has undertaken to administer the great trust which has reposed upon him during the last eight years. . . . I undertake to say that he has by his public service piled up a mountainous presumption of plain honesty which is not to be overcome by speeches upon the floor of either house of Congress."[85] Senator Beveridge of Indiana, always a staunch friend of Roosevelt, Spooner of Wisconsin, and Proctor of Vermont likewise took up the defense of the administration; and they were ably supported by a number of western men—Newlands of Nevada, Smoot of Utah, Dubois of Idaho, Warren of Wyoming,[86] and Perkins and Flint of California. It is true that the strongest opposition came from the West, but it was no longer strictly a case of West versus East on the question of timber conservation; and after several days of debate, it seemed that the forest reserves were safe.

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[82] *Cong. Rec.*, Feb. 18, 1907, 3184, 3185.

[83] *Stat.* 30, 1781: H. Doc, 613; 59 Cong. 1 sess.

[84] *Report*, Land Office, 1898, 89.

[85] *Cong. Rec.*, Feb. 18, 1907, 3183-3195; Feb. 19, 3281-3297; Feb. 21, 3521-3542.

On February 23, however, Fulton arose in the Senate with an amendment, "That hereafter no forest reserve shall be created, nor shall any addition be made to one heretofore created, within the limits of the states of Oregon, Washington, Idaho, Montana, Colorado or Wyoming, except by act of Congress."[87] Heyburn did not think this quite radical enough, so Carter tried to tack on a provision opening some of the lands which had been reserved, but, at the suggestion of Patterson of Colorado, this attempt was abandoned. Heyburn made it perfectly clear, however, that while he would accept Fulton's amendment as sufficient for the time, ultimately the forest reserves already created would have to be reduced in some way.[88] It seems reasonably clear that Heyburn was prepared with a filibuster on the appropriation bill if Fulton's amendment were not agreed to, and that the Senate understood this perfectly well, for after considerable debate, the amendment passed without even a call for the yeas and nays,[89] and in neither of the conference committees was it in any way changed.

THE ACT OF 1907

The appropriation bill as finally passed,[90] like the act of June 4, 1897, was a series of compromises; but, unlike the earlier act, it made the most important concessions to the anti-conservationists. The conservation party secured a $1,000,000 increase in the appropriation for the Forest Service, and an increase in salary for some of the officers of the Bureau, including the chief forester. They also secured a provision permitting the export of forest reserve timber beyond the boundaries of the state wherein it had been cut. This provision was necessary before the management of the forest reserves could be put on any business basis. The forest reserves, by the way, were henceforth to be known as "national forests."

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[86] The attitude of Warren at this time was creditable to him, for he had just been involved in a bitter contest with Hitchcock regarding certain fences on the public domain, and he might easily have taken a more active part in the attacks upon the secretary. (See H. Report 1335; 62 Cong. 3 sess.)

[87] *Cong. Rec.*, Feb. 23, 1907, 3720.

[88] *Ibid.*, 3722.

[89] *Cong. Rec.*, Feb. 25, 1907, 3869.

[90] *Stat.* 34, 1269.

The anti-forest reserve party secured concessions of considerably greater importance. In the first place, Fulton's amendment meant that, in the six states of the Northwest which contained the vast bulk of western timber, there could be little further extension of the system of forest reserves, for it was not likely that Congress would ever establish many reserves. It meant the repeal of the act of 1891, the most important act in the history of the forestry policy, as far as it provided for forest reserves in most of the timber lands of the West; although President Roosevelt took most of the sting out of this provision by proclaiming twenty-one new reserves in the six northwest states, on March 2, before he signed the bill.[91]

A further concession was made to the anti-conservationists, in the abolition of the forest reserve special fund, by which, since 1905, receipts from the sales of timber and grazing privileges had been available for the work of the Forest Service. For the fiscal year 1905-1906, the Forest Service had received $514,086 for grazing permits and $242,668 for timber sold—a total of over $750,000;[92] while in 1906-1907, the receipts were more than double that amount—over $1,530,000.[93] Thus the abolition of this special fund more than balanced the $1,000,000 increase in the appropriation.

A third concession to Fulton's party provided that 10 per cent of the receipts of each forest reserve should be given to the state for schools and roads in the counties in which the reserve was situated. As a final slap at the Forest Service, the Secretary of Agriculture was required to submit to Congress each year a classified and detailed report of all receipts from the Forest Service, and a classified and detailed estimate of all expenditures. This was a proper enough requirement in itself, but the debates show that one of the motives behind it was hostility to the Forest Service, rather than a desire for more careful government accounting.

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[91] *Stat.* 34, Part 3. It was stated in Congress years afterward that Roosevelt signed the proclamation creating these reserves and permitted them to be enlarged afterward. In 1914, there was a great deal of criticism of the manner in which the proclamation had been issued. (*Cong. Rec.*, Mar. 10, 1914, 4633.)

[92] *Report*, Dept. of Agr., 1906, 278, 281.

[93] *Report*, Sec. of Agr. (abridged edition), 1909, 65.

ANTI-CONSERVATION ATTACKS SINCE 1907

The anti-conservation attack of 1907, although in a measure successful, did not end the hostility to the "national forests," as they were called after 1907. Almost every year since then, some phase of the reservation policy has been attacked in Congress. In 1909, Senator Teller of Colorado, now grown old in the service of "poor settlers," led a determined attack on the reserves; and he was supported by Borah of Idaho, Bailey of Texas, Carter of Wyoming, and Hale of Maine.[94]

In the debates on the appropriation bill of the next year, Mondell entered a strong protest in the House against the "scandalous extravagance" of the Forest Service; while the Idaho delegation—Heyburn and Borah, and Englebright of California—led a similar fight in the Senate. In 1911, Mondell again led the fight on the Forest Service, backed by two of the Colorado representatives, Martin and Rucker, and by Floyd of Arkansas and Booher of Missouri, and in the Senate by Heyburn and by Clark of Wyoming.[95]

The debates on the Agricultural Appropriation Bill of 1912 were the occasion of a determined attack by Representative Hawley of Oregon, who spoke at length of the hardships imposed on the settlers, and the consequent unfortunate migration to Canada. Hawley was backed not only by the Idaho delegation and by some western men, but by a few from other sections of the country. A determined but unsuccessful attempt to open up agricultural lands in the forest reserves will be treated in a later connection.[96]

THE BALLINGER-PINCHOT CONTROVERSY

In 1913, Representative Humphrey of Washington, one of the new spirits in the opposition, launched a campaign against the national forests, which he pushed vigorously during the following years, with the assistance of several of his colleagues, particularly Johnson. Several of the Washington delegation were particularly hostile about this time; and the numerous references to Pinchot's candidacy for the senatorship from Pennsylvania in 1914, to the Ballinger controversy, and to the Progressive party, indicate that their attitude was one aspect of a party squabble. To some extent, the forest reserve question during the last ten years or more has been a question of party politics. The split in the Republican party in 1912 was due to Roosevelt's disapproval of President Taft's stand on conservation. Roosevelt was the man who, with Pinchot, had really created the Forest Service, and had done more than anyone else to create the system of forest reserves; and he was of course very anxious that his successor should carry that policy on with vigor. President Taft, however, soon fell somewhat under the influence of the reactionary wing of his party, and evinced what Roosevelt considered a lack of enthusiasm for conservation. In the Ballinger controversy, he took sides with Ballinger, and against Pinchot and Glavis, who were trying to prevent the patenting of a number of fraudulent coal claims in Alaska. Taft even dismissed Pinchot from the Forest Service.

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[94] H. R. 27053; 61 Cong. 1 sess., 3222 et seq.

[95] H. R. 18162; 61 Cong. 2 sess.: H. R. 31596; 61 Cong. 3 sess.

[96] H. R. 18960; 62 Cong. 2 sess. Cross Reference, p. 257.

Taft's stand in these matters was such that Roosevelt could not possibly forget or forgive. The dismissal of Pinchot, who had been Roosevelt's most trusted assistant, was the "last straw." How keenly Roosevelt felt this is indicated, almost pathetically, by the following excerpt from his autobiography: "I believe it is but just to say that among the many, many public officials who under my administration rendered literally invaluable service to the people of the United States, he [Pinchot] on the whole, stood first. A few months after I left the Presidency he was removed from office by President Taft."[97] Perhaps Roosevelt did not know at that time that President Taft had gone so far as to antedate public records in his effort to shield Ballinger; but he knew enough to distrust Taft's stand on conservation. The truth of the matter probably is, not that Taft was under any improper influences, although he was somewhat under the sway of the reactionaries of the party, but rather that he had a very different point of view from that of Roosevelt. Roosevelt was aggressive

[97] Roosevelt, "Autobiography," 429.

a[illegible]nt, and always ready to do anything that he thought the pu[illegible]terest demanded, if it was not specifically forbidden. Taft, on the other hand, was cautious, and did not act unless specifically authorized by law. In an administrative office, the difference between these attitudes was sometimes very great.

When the question of investigating Ballinger was up in Congress in 1910, the vote was purely on political lines, the Republicans lining up with President Taft for a "whitewashing" of the secretary, and also for the inclusion of the Forest Service in the investigation; while the Democrats generally wanted to discredit Ballinger and opposed the inclusion of the Forest Service in the investigation, as tending to cloud the issue. The Republicans won, and some thirteen volumes of "whitewash" were administered to a case which needed it rather badly.

Humphrey was a staunch Republican, was one of Ballinger's spokesmen in the House in 1910, and his sympathies were with Ballinger in the investigations. Also, in the fight over the national convention two years later, he defended the selection of the Washington delegates, who were supporters of Taft, and, according to current charges, had been fraudulently chosen. The writer ventures no opinion as to the grounds for these charges, or as to the validity of Taft's nomination, or as to the relation of Humphrey to the whole matter; but the point is that Humphrey's attitude toward the conservation policy was a party matter. The upshot of the whole affair was that Roosevelt left the Republican party after the Chicago convention in 1912, and formed the new Progressive party. His defection naturally brought up conservation—the most important of his "policies"—for discussion and criticism.[98]

Some of the Republicans were in loyalty bound to show that the conservation policy, the favorite foster child of the founder of the

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[98] The later work of Mr. Glavis, the man who precipitated the Ballinger controversy, seems to be a rather unfortunate chapter in the history of conservation. Soon after his dismissal from the government service, he was appointed Secretary of the Conservation and Water Power Commissions of California; and while thus a servant of the state, he acted in land transactions as the agent also of certain lumber companies. There was no particular allegation of fraud or dishonesty, but his actions had put him in a compromising position, and he was dismissed from his position. He had been credited with some excellent work in the recovery of state school lands. (*Outlook*, Nov. 23, 1912, 665; Feb. 8, 1913, 289.)

Progressive party, had been conceived in iniquity, reared [illegible]r, and should now be cast into the outer darkness of political [illegible]ude. Also, some of the reactionaries in the Republican party saw in the conservation policy a menace to their own interests. Timber interests, coal interests, oil interests, water power interests, to some extent grazing, and even railroad interests, saw that the conservation movement was destined to reduce the opportunities for private exploitation. Thus the Republican party became to a certain extent hostile to the Forest Service and to conservation generally, the Republican leaders lining up with the western anti-conservationists and "states righters." Representative Bryan of Washington pointed out that Humphrey's attack in 1913 was essentially an attack upon Roosevelt and the Progressive policies, although Humphrey had earlier been an enthusiastic supporter of Roosevelt.

Bryan spoke of Humphrey's "never failing allegiance to the interests of men of great wealth, and those who during the decades past, through the men who were the leaders of the Republican party, obtained so many privileges for the few against the interest of the people." Representative Murdock, a Progressive leader from Kansas, in replying to Humphrey's attack, openly accused the Republican party of hostility to the reserves: "These are the charges, then, that the gentleman brings against the Bureau of Forestry. They would not be of moment if the gentleman did not couple with his resolution the assertion—made as one of the Republican members of this body, and speaking for a considerable part of the membership of this body, and representing really, as I believe, the sentiments of the leaders of the Republican party—that the policy of national conservation should be abandoned." This was not denied by anyone on the floor.[99]

The attacks on Pinchot and on the Forest Service were also to some extent connected with Pinchot's candidacy for the senatorship in Pennsylvania. Progressives everywhere boomed his candidacy, even in Congress, while Republicans found it expedient to attack not only his record in the Forest Service, but even the general conservation movement, with which he had so long been identified. Humphrey made speeches in Congress attacking Pinchot, with no purpose evidently but to weaken Pinchot's campaign; and on one occasion, Moore of Pennsylvania and Johnson of Washington became so engrossed in a debate on the subject that Mann of Illinois had to urge a point of order.[100]

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[99] H. R. 28283; 62 Cong. 3 sess., 2945 et seq.: H. R. 13679; 63 Cong. 2 sess., 4614 et seq.: *Cong. Rec.*, 63 Cong. 1 sess., 1862: *Cong. Rec.*, Mar. 1, 1909, 3534; Jan. 5, 1910, 325.

In the attack of 1916, some men even from the central and eastern states evinced a suspicion that the Forest Service was extravagant, if nothing worse. In the House, Bennett of New York, Steenerson of Minnesota, Clark of Missouri, Hamilton of Michigan, and Haugen of Iowa; and in the Senate, Stone of Missouri and Borah of Idaho voiced this suspicion.[101]

THE ALASKA FORESTS

In the anti-conservation attacks of recent years, the Alaska national forests have been subjected to a great deal of criticism. There are two reserves in Alaska, both of them extending along the coast—the Chugach, in the Prince William Sound region, far to the north, and the Tongass, which lies just north of the Canadian line. Criticism has been directed mainly at the Chugach reserve, which has the poorest stand of timber. The charge has been made repeatedly that little (Humphrey once said only 10 per cent) of the area included is real forest land, and that what timber there is there, is of poor quality, and not worth the cost of protection.

As to the justice of the criticism, it is somewhat difficult to judge, owing to the contradictory nature of the reports. Doubtless there is much truth in the charges regarding the quality of the timber included here. The Governor of Alaska insists that the Chugach National Forest is largely waste land which will never be utilized, and is not worth the cost of maintenance; while Mr. Graves, after a careful inspection of these regions, reported that there was a large amount of timber which would at least be useful in the industrial development of the region near the forest. Perhaps mining interests have been nearly as important as timber interests in the Chugach forest. One corner of this forest contains some coal claims in the Behring field, and in the controversies arising out of the Behring coal claims, it was charged that the existence of this national forest prevented their development. This charge was not true, for the existence of the forest had no effect on the legality of the claims; but, perhaps with some reason, mining companies would usually prefer to operate outside of a national forest.[102]

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[100] *Cong. Rec.*, Jan. 7, 1910, 388, 393, 406; May 16, 1912, 6531; June 3, 1913, 1884; June 17, 1913, 2058; Nov. 22, 1913, 5971, 5972; Mar. 12, 1914, 4755; Mar. 14, 1914, 4867; Jan. 22, 1915, 2146; Apr. 18, 1916, 6395: H. J. Res. 103; 61 Cong. 2 sess.: *Outlook*, May 14, 1910, 57; Sept. 10, 1910, 60: *World's Work*, 25, 246.

[101] H. R. 20415; 63 Cong. 3 sess., 2148 et seq.: H. R. 12717; 64 Cong. 1 sess., 6386, 6450, 6589, 10326 et seq.

[102] *Cong. Rec.*, Feb. 10, 1913, 2945: *Am. Lumberman*, Sept. 25, 1915, 49: *Outlook*, Mar. 22, 1916, 679: *Report*, Dept. of Int., 1916, Vol. II, 401, 402: S. Doc. 77; 62 Cong. 2 sess.

CHAPTER VI

FOREST RESERVES IN THE APPALACHIAN AND WHITE MOUNTAINS

Few would have been so bold as to predict, when the Forest Reserve Act was passed in 1891, that the government would ever go so far as to *buy up* denuded timber lands for forest reserves. As has been pointed out, the Forest Reserve Act, which provided only for the retention of forest lands already owned by the government, did not have the support of Congress when it passed;[1] and the policy of buying up lands was a step far in advance of this, a step which might well have seemed impossible at the time. Furthermore, as long as the government was selling its valuable timber lands for next to nothing under the Timber and Stone and Cash Sale acts, or giving it away under some of the other land laws, there was little apparent wisdom in buying up worthless timber land, no matter how cheaply it might be obtained. However illogical the idea may seem when viewed in this way, it is nevertheless true that agitation for the purchase of lands for national forests in the Appalachian Mountains arose within less than ten years after the passage of the Forest Reserve Act; and within a second decade, had resulted in important legislation.

EARLY AGITATION FOR APPALACHIAN RESERVES

In November, 1899, the Appalachian National Park Association was organized at Asheville, North Carolina, with members from various parts of the country; and early in the year 1900, memorials from this association, from the Appalachian Mountain Club of New England, from the American Association for the Advancement of Science, and from the American Forestry Association, were presented in Congress, asking that measures be taken for the preservation of the southern Appalachian forests.[2] Senator Pritchard of North Carolina took up the cause in Congress, and secured an appropriation of $5000 to be used to investigate forest conditions in the Appalachian Mountains.[3] The investigation was completed in about a year, and Secretary of Agriculture James Wilson made a report recommending the establishment of Appalachian reserves, a recommendation in which President McKinley concurred.[4]

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[1] Cross References, pp. 114-118.

About a week after Secretary Wilson made his report, Senator Pritchard introduced a bill appropriating $5,000,000 for the purchase of not less than 2,000,000 acres in the southern Appalachians.[5] This bill was favorably reported by Senator Beveridge of Indiana,[6] but made no further progress, and in December, Pritchard introduced another bill of similar provisions, which was likewise favorably reported, and even debated somewhat, but never came to a vote.[7] A bill introduced by Senator Burton of Kansas in the same session, however, was not only favorably reported, but after considerable debate, passed the Senate with very little opposition.[8] Senator Depew of New York was the most conspicuous friend of this bill, while Nelson of Minnesota, Bailey of Texas, and Spooner of Wisconsin—the last named an old friend of conservation—furnished what little opposition there was. In the House, the bill was favorably reported but was not discussed.[9]

Thus as early as 1902, a decade after the passage of the Forest Reserve Act, a bill passed the Senate with very little opposition, authorizing the purchase of national forests in the southern Appalachian Mountains at a cost of $10,000,000. Such action in the Senate seems rather strange when viewed in connection with the general attitude of that body toward forest conservation. The vote of the southern senators is easy enough to explain. Some of them were sincerely interested in the preservation of the Appalachian forests, others were anxious to have the Federal government come in and buy up timber lands, because such a procedure furnished a possible market for some lands of little value, and insured their protection at Federal expenses. Just what other section or sections of the country joined with the South to effect the passage of such a bill, it is impossible to say from any evidence appearing in the *Congressional Record.*

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[2] S. Doc. 84; 57 Cong. 1 sess., 158-165.

[3] *Cong. Rec.*, Jan. 15, 1900, 801; Apr. 21, 1900, 4508: *Stat.* 31, 197.

[4] S. Doc. 84; 57 Cong. 1 sess., 166-168.

[5] S. 5518; 56 Cong. 2 sess.

[6] S. Report 2221.

[7] S. 492; 57 Cong. 1 sess.: *Cong. Rec.*, Apr. 26, 1902, 4710-4714.

[8] S. 5228; 57 Cong. 1 sess.: *Cong. Rec.*, June 7, 1902, 6429-6432; June 24, 1902, 7281-7287.

[9] H. Report 2913.

In the House, Appalachian forest bills were introduced in the fifty-seventh Congress by Brownlow of Tennessee, and by Pearson and Moody of North Carolina; and here as in the Senate the committee report was favorable, but nothing was accomplished.[10] It seems rather strange that even a favorable committee report should have been secured as early as this.

During the next few years, a number of Appalachian forest bills were brought forward; in the Senate, by Burton of Kansas and Overman of North Carolina, and in the House by Brownlow and Gibson of Tennessee.[11]

THE DEMAND FOR FORESTS IN THE WHITE MOUNTAINS

The movement for Appalachian forests had been under way only a few years when agitation arose for national forests in the White Mountains also, and Senator Gallinger and Representative Currier of New Hampshire introduced several bills into Congress,[12] but none of these passed either house. These men did not have as effective an organization as the southern men, but they presently saw that a combination with the southern men would put the whole movement on a better basis; and in 1906, Senator Brandegee of Connecticut reported a bill for the acquisition of $3,000,000 worth of national forests in the "Appalachian *and* White Mountains." This bill passed the Senate without a comment.[13] Thus the curious combination of New England and the South seemed to be very effective in the Senate.[14]

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[10] H. R. 3128, H. R. 6543, H. R. 12138, H. R. 13523, H. Report 1547; 57 Cong. 1 sess.

[11] S. 887, H. R. 1196, H. R. 5065; 58 Cong. 1 sess.: S. 408, H. R. 40; 59 Cong. 1 sess.

[12] S. 2397, H. R. 7284; 58 Cong. 2 sess.: S. 34, H. R. 181; 59 Cong. 1 sess.

[13] S. 4953; 59 Cong. 1 sess.: *Cong. Rec.*, June 22, 1906, 8952.

[14] See *Cong. Rec.*, June 24, 1910, 8989.

The House was at no time so favorably disposed toward buying up forest reserves. The rulings of Speaker Cannon were claimed to be responsible for the failure of House bills to come to a vote, and doubtless there was truth in this assertion, for Cannon was opposed to the idea, and was of course in a position to make his opposition felt.[15] Aside from his influence, however, the interests favorable to this legislation were certainly not so strong in the House as in the Senate. In spite of the situation in the House, an amendment to the Agricultural Appropriation Bill passed both houses in 1907, granting $25,000 for the survey of lands in the Appalachian and White mountains.[16] The House vote on this proposition shows New England and the southern states leagued in favor of the proposition, while the north central and western states were generally opposed.[17]

In the sixtieth Congress, an increasing interest was shown. Senators Brandegee of Connecticut and Gallinger of New Hampshire did aggressive work in the Senate, and a bill fathered by the former, appropriating $5,000,000 for the purchase of forest lands, passed the upper house in spite of rather vigorous opposition from some of the western anti-conservationists—Teller, Heyburn, Fulton, and Clark.[18] This bill, with a number of amendments, also passed the House, by a narrow margin—157 to 147;[19] but when it came back to the Senate as amended, a determined filibuster was undertaken by Teller, Heyburn, Clark, Borah, and Carter, and the measure was finally lost.[20]

A number of bills were introduced into the House by Lever of South Carolina, Currier of New Hampshire, Pollard of Nebraska, and Weeks of Massachusetts; but none of these ever received favorable consideration.[21] A bill reported by Scott of Kansas, chairman of the Committee on Agriculture, passed the House, however, by the decisive vote of

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[15] *Forestry and Irrigation*, Jan., 1907, 30; Apr., 1908, 178, 179.

[16] *Stat.* 34, 1281.

[17] *Cong. Rec.*, Mar. 2, 1907, 4489.

[18] S. 2985, S. 4825; 60 Cong. 1 sess.: *Cong. Rec.*, May 15, 1908, 6328-6330; May 16, 6385-6401, 6403-6409.

[19] *Cong. Rec.*, Mar. 1, 1909, 3566.

[20] *Cong. Rec.*, Mar. 3, 1909, 3749-3751.

[21] H. R. 10456, H. R. 21220, H. R. 21221, H. R. 21357, H. R. 21767, H. R. 22238; 60 Cong. 1 sess.: H. R. 26295, H. R. 26923, H. R. 27056; 60 Cong. 2 sess.

205 to 41. The decisiveness of this vote is explained by the fact that the bill merely appropriated $100,000 for coöperation with the states in forest protection, and created a commission for further investigation. Many of the advocates of national forests voted for the bill because they thought it was the best obtainable, while many opponents voted for it because they thought it might stave off something more radical.[22] The bill followed the views of Speaker Cannon in shifting responsibility largely to the states, and was for that reason viewed with disfavor by the American Forestry Association; but it never came up in the Senate.[23]

INCREASING SCOPE OF THE MOVEMENT

Not for the southern Appalachians and White mountains alone were national forests demanded. In 1905, Representative Dovener of West Virginia introduced a bill for the protection of the Potomac watershed, and Representative Hubbard and Senator Elkins, also of West Virginia, called for the same thing.[24] Representatives Shakleford and Lamar of Missouri wanted a national forest in the Ozarks; Lindbergh of Minnesota wanted one at the head of the Mississippi River; and Bradley of New York wanted the Highlands of the Hudson preserved; while Stephens of Texas made several efforts to secure a reserve at the head of the Red River.[25]

Thus, at the end of a decade of agitation, the movement for the purchase of forest lands had attained a very broad scope as well as great strength; and friends of the movement entered the sixty-first Congress, in Taft's administration, with high hopes. Austin and Brownlow of Tennessee, Weeks of Massachusetts, and Guernsey of Maine introduced forest reserve measures into the House;[26] and Gallinger of New Hampshire brought up a bill in the Senate,[27] which was debated at considerable length. Gallinger's bill was finally postponed in favor of the "Weeks" bill, which was destined to mark a new epoch in the history of the United States forestry policy.

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[22] *Cong. Rec.*, May 21, 1908, 6688-6705.

[23] *Forestry and Irrigation*, June, 1908, 356.

[24] H. R. 5365, H. R. 13784, S. 3504, S. 4971; 59 Cong. 1 sess.: H. R. 11357; 60 Cong. 1 sess.

[25] H. R. 11749, H. R. 15938, H. R. 16972, H. R. 20186, H. R. 20887, H. R. 21302, H. R. 21487; 60 Cong. 1 sess.: H. R. 63; 61 Cong. 1 sess.: *Cong. Rec.*, Mar. 31, 1908, 4179.

[26] H. R. 11, H. R. 105, H. R. 11796; 61 Cong. 1 sess.: H. R. 21589; 61 Cong. 2 sess.

[27] S. 4501; 61 Cong. 2 sess.

THE WEEKS BILL

On July 23, 1909, Representative Weeks introduced a bill, "to enable any state to coöperate with any other state or states or with the United States, for the protection of the watersheds of navigable streams, and to appoint a commission for the acquisition of lands for the purpose of conserving the navigability of navigable rivers." This bill appropriated $1,000,000 for the current year and $2,000,000 each year until 1916, for the purchase of forest lands in the southern Appalachian and White mountains.

The House Committee on Agriculture, after exhaustive hearings covering a period of nine months, reported the bill favorably; although with a strong minority report signed by seven members of the committee, including the chairman, Charles F. Scott of Kansas.[28]

Once before Congress, the bill aroused more spirited debate than had been stirred up by any conservation measure in several years. Conservation measures had usually had two or three active advocates, almost never more than a half dozen, and perhaps as many bitter opponents from the western states; but the Weeks Bill was debated with great energy by men from every part of the country.[29]

ARGUMENTS IN FAVOR OF THE BILL

A great number and variety of arguments were brought forward in support of the bill, in the debates or in the reports. The assumed purpose, as expressed in the title, was to conserve the navigability of navigable rivers. The protection of forests on the watersheds was assumed to conserve navigability in two ways: first, by preventing the erosion incident to deforestation and thus preventing the deposit of silt along the lower watercourses; and second, by insuring a more regular waterflow, thus rendering the rivers navigable for a greater period during times of drouth.[30]

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[28] H. Report 1036; 61 Cong. 2 sess.

[29] *Cong. Rec.*, June 24, 1910, 8974-9027; June 25, 9045-9051; Feb. 15, 1911, 2575-2602.

[30] S. Report 459; 60 Cong. 1 sess., pt. 2, pp. 2-4. See also U. S. Geological Survey, Professional Paper 72, 1911; and *Forest Circ.* 143.

With the prevention of erosion was of course involved the preservation of the soil in the interests of agriculture;[31] while greater regularity of streamflow was expected to be of benefit, not only because of its effect on navigation, but because it would lessen damage from floods and would increase the amount of water power available for commercial development.[32] Some rather elaborate figures were given to show the value of even a small increase in the minimum flow of streams used for generating water power.[33]

The question of forest conservation was given more weight in the debates than was the matter of stream navigability. The need of a future supply of the valuable hardwoods of the southern Alleghanies was pointed out, and some even went so far as to predict that the buying up of these lands would be a paying investment for the government.[34]

The value of the forest lands as summer resorts was urged as an argument for Federal purchase,[35] although the bearing of this argument is not clear. It was, for instance, pointed out that the income from the summer resort business in New Hampshire alone was more than $8,000,000 annually, and complaint was made that many people who had formerly frequented the White Mountains now spent their summers in Canada, because the forests in the White Mountains were being destroyed.[36]

Among other arguments for this bill were some of a distinctly "pork barrel" flavor. Thus Representative Gillett of Massachusetts wanted national forests in the East to balance the river and harbor appropriations which had been going to other sections of the country; and Gallinger of New Hampshire thought that since the government was spending money on national forests in the West, it should in fairness maintain some also in the East.[37]

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[31] *Cong. Rec.*, June 24, 1910, 8986; *Forest Circ.* 176.

[32] *Cong. Rec.*, June 24, 1910, 8991, 9007: S. Report 459; 60 Cong. 1 sess., 2-5: U. S. Geological Survey, Professional Paper 72, 1911, 13, 14.

[33] S. Report 2537; 59 Cong. 1 sess., 5, 6: S. Doc. 91; 60 Cong. 1 sess., 13: *Forest Circ.* 144.

[34] *Cong. Rec.*, June 24, 1910, 8992: S. Doc. 84; 57 Cong. 1 sess., 162: S. Doc. 91; 60 Cong. 1 sess., 9-12.

[35] S. Report 2742; 58 Cong. 3 sess., 2, 3.

[36] S. Report 2537; 59 Cong. 1 sess.

[37] *Cong. Rec.*, June 24, 1910, 9014; Feb. 15, 1911, 2578.

ARGUMENTS AGAINST THE BILL

Among the arguments against the bill, the most prominent was that of unconstitutionality.[38] It was argued that the real purpose of the bill was not the conservation of navigable streams, but the conservation of forests, and that there was therefore no basis for Federal action. Without question it is true that the main purpose of the act was not the conservation of navigable streams, and the relation of forests to stream navigability, while it had some slight weight, was a minor consideration and was accented merely to meet the question of constitutionality. In a report made in 1904, on one of the White Mountain bills, the question of conserving navigable rivers had been given a secondary place; and Senator Gallinger admitted that it was later given prominence merely to meet the question of constitutionality.[39] In 1908, the House Committee on the Judiciary had reported on the matter of constitutionality, and while there was a wide variety of opinions in that committee, the majority thought that *if it appeared that forest reserves would aid navigation*, Congress had the power to acquire such reserves.[40] Of course the South, with its strong states' rights notions, was in a peculiar position in urging such an extension of Federal functions as this.

The question as to whether forest protection is an aid to navigation cannot be discussed in detail here, for it is still a mooted question. The general consensus of opinion is that a forest cover has some effect, by preventing erosion and thus reducing the deposit of silt in the lower watercourses, and by insuring a more regular streamflow.

On the first point, regarding the prevention of erosion, there is a fairly general agreement among authorities. There cannot be any doubt that unprotected land will sometimes erode worse than land which has a forest cover. As to the effect of forests in equalizing waterflow, there is no such agreement. Most authorities seem to think that forests have some such effect, but others deny it, and are able to cite respectable evidence in support of this view. It is certain that the influence of forests in this respect, like their influence on climate, has been greatly exaggerated by many writers, and was grossly exaggerated in the debates in Congress.[41]

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[38] *Cong. Rec.*, June 24, 1910, 9017, 9018, 9021; Feb. 15, 1911, 2578: H. Res. 365; 60 Cong. 1 sess.

[39] *Ibid.*, Feb. 15, 1911, 2578: S. Report 2742; 58 Cong. 3 sess.

[40] H. Report 1514; 60 Cong. 1 sess.

Of course those who did not believe in the vital relation of forests to stream navigability did not believe that forest reserves would have any great influence in the prevention of floods. Unquestionably, too, there was much logic in this position. Some of the arguments of the conservationists on this point were not tempered with good judgment. Thus Senator Smith of South Carolina seemed to assume that the only thing necessary to prevent future floods was the preservation of the forests at the headwaters of rivers; and the loss of $18,000,000 worth of property in the Piedmont plateau in 1901 and 1902 was often pointed out as loss which would in large part have been avoided had there been good forests in the mountains.[42] Forest destruction was referred to as the cause of the increasing destruction of property by floods along the rivers below; while other factors, such as the breaking up of lands into farms, the crowding of cities down near the water's edge and the development of valuable manufacturing plants along the rivers—factors no doubt more important than forest destruction—were never mentioned. The opponents of the bill were justified in saying at least that the effect of forests on floods and on navigability was greatly exaggerated.

An important argument against the bill was the great ultimate cost of the new reserves. While the amount appropriated by the Weeks Bill was only $11,000,000, many feared that it was launching the government on a policy which would ultimately prove very expensive. Of course the danger here was purposely exaggerated by some of the opponents of the bill, for mere rhetorical purposes. Thus Representative Rucker of Missouri spoke repeatedly of the $1,000,000,000 which was eventually to be wasted in this way.[43] It was not open to question that the appropriation under the Weeks Bill was regarded by the friends of the bill as a mere beginning, and that ultimately much more should be given, but probably no one contemplated an expenditure of $1,000,000,000.[44] The Secretary of Agriculture estimated that there were about 2,000,000 acres in the White Mountains and 75,000,000 acres in the southern Appalachians which should eventually receive protection, which could probably be bought at an average price of $6 per acre for the White Mountain region and $3.50 for the southern Appalachians; but the secretary recommended the immediate purchase of only 600,000 acres in the White Mountains and 5,000,000 in the southern Appalachians.[45]

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[41] S. Doc. 84; 57 Cong. 1 sess., 123 et seq.: S. Doc. 676; 60 Cong. 2 sess., Vol. II, 95 et seq., 687-710: H. Report 1036; 61 Cong. 2 sess., 6-17: *Independent*, 68, 998: *Am. Forestry*, Apr., 1910, 209: *Proceedings*, Am. Forestry Assoc., 1895, 24 et seq.; 1897, 139, 165: *Scientific American*, May 23, 1908, 372; Oct. 29, 1910, 334: Hearings before the House Committee on Agriculture, Dec. 9, 1908; 60 Cong. 2 sess., 15, 16: *Forest Circ.* 143, 144: *Forest Bul.* 85: *Agr. Yearbook*, 1903, 279.

[42] *Cong. Rec.*, Feb. 15, 1911, 2601: H. Report 1547; 57 Cong. 1 sess., 3: S. Report 459; 60 Cong. 1 sess., 7.

[43] *Cong. Rec.*, Mar. 1, 1909, 3531.

It was foreseen that there was danger of speculators buying up lands, and Representative Crumpacker of Indiana feared that the government would have to pay high for all that it bought. This was a very reasonable fear, but later developments seem to indicate that the bill was wisely drawn as far as guarding against this was concerned.[46]

While some men opposed the bill on the ground of its great cost, Newlands of Nevada opposed because it was not comprehensive enough. He showed how the bill was closely related to the waterways bill and favored a comprehensive waterways bill to include forest reserves in the East as one of its items. Newlands was, however, later brought to favor the bill.[47]

A final argument against the proposal embodied in the Weeks Bill was that the states should buy their own forest reserves, as Pennsylvania and New York and some of the other states had done.[48] In the case of the White Mountains and Appalachian Mountains this was, however, clearly impossible for two reasons. In the first place, the proposition demanded more resources than any one state could command. It is true that the reserve in the White Mountains would have cost little more than New York State was spending on her forest reserve, but New Hampshire was a poor state, and even had that state been rich enough to handle the proposition, the benefits, as far as they related to streamflow, would have accrued to other states to the south—Massachusetts and Connecticut. The southern Appalachian reserve was likewise too big a proposition for any single state, and it was clearly impossible to get the states to combine in such a way that the expense could be shared according to benefits.[49]

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[44] *Am. Forestry,* Mar., 1911, 168.

[45] S. Doc. 91; 60 Cong. 1 sess., 32-37.

[46] *Cong. Rec.,* June 24, 1910, 9017.

[47] *Cong. Rec.,* June 25, 1910, 9049, 9051; Feb. 15, 1911, 2587-94, 2602.

[48] *Cong. Rec.,* June 24, 1910, 9020, 9021, 9025; Feb. 15, 1911, 2583-86.

If the protection of these forests had been assumed to benefit mainly by the preservation of the timber, the prevention of forest fires and the stimulation of the summer resort business, there would have been much justice in leaving it to the states; but as far as the proposition rested on the theory of stream conservation, it seemed more properly a Federal function. At any rate, it was perfectly clear that if the forests were to be conserved, the Federal government must take charge.

INFLUENCES FAVORING ITS PASSAGE

Various influences favored the passage of the bill. In the first place, many of the influential government officials favored it. President Taft approved of the proposal, just as McKinley and Roosevelt had approved of similar proposals before; and of course Secretary of Agriculture James Wilson and most of the officials in the Forest Service and in the Geological Survey were favorably disposed.

Many influential organizations throughout the country registered their approval of forest reserves in the Appalachian and White mountains. Among these organizations were the following: the Adirondack Murray Memorial Association, the American Civic League, the American Cotton Manufacturers' Association, the American Association for the Advancement of Science, the American Forestry Association, the American Institute of Electrical Engineers, the American Mutual Newspaper Association, the American Paper and Pulp Association, the American Society of Civil Engineers, the Appalachian National Forest Association, the American Association for the Preservation of the Adirondacks, the Daughters of the American Revolution, the Eastern States Retail Lumber Dealers' Association, the Irrigation Congresses of 1907, 1908, 1909, and 1910, the Massachusetts Forestry Association, the Merchants' Association of New York, the National Association of Carriage Builders, the National Association of Manufacturers, the National Association of Box Manu-

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[49] S. Report 459; 60 Cong. 1 sess., pt. 2, 7.

facturers, the National Association of State University Presidents, the National Association of Cotton Manufacturers, the National Board of Trade, the National Forest Association (organized at Atlanta, Georgia), the National Federation of Women's Clubs, the National Hardwood Lumber Association, the National Lumber Manufacturers' Association, the National Slack Cooperage Manufacturers' Association, the National Wholesale Lumber Dealers' Association, the Pennsylvania Lumbermen's Association, the Pennsylvania Water Supply Commission; and even the United States Hay Fever Association. Favorable resolutions were also adopted by the Chambers of Commerce of various cities; New York, Boston, Cleveland, Pittsburgh, and Los Angeles; and by the legislatures of several of the states; North and South Carolina, Virginia, Georgia, Tennessee, and Oregon.[50]

OPPOSITION TO THE BILL

In the House, perhaps one of the strongest influences against the bill was the attitude of Speaker Cannon and Chairman Scott of the Committee on Agriculture. It had been repeatedly charged that it was only the arbitrary rulings of the speaker that had prevented the passage of some forest reserve bill long before this;[51] and no doubt his known opposition had great influence, especially since Chairman Scott of the committee reporting the bill was in full sympathy with him. In spite of all opposition, however, the bill passed the House on June 24, 1910, by a vote of 180 to 111.[52]

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[50] *Forestry and Irrigation*, Jan., 1906, 23, 50; June, 1907, 304; July, 1907, 349; Mar., 1908, 129: *Conservation*, Dec., 1908, 659; Mar., 1909, 177; July, 1909, 427: *American Forestry*, Nov., 1910, 677; Mar., 1911, 187: S. Doc. 84; 57 Cong. 1 sess., 172-179: S. Report 2537; 59 Cong. 1 sess., 9: S. Report 826; 61 Cong. 2 sess., 46: *Cong. Rec.*, Jan. 20, 1908, 907; Mar. 28, 1908, 4083; Feb. 11, 1909, 2241.

[51] *Forestry and Irrigation*, Jan., 1907, 30; Apr., 1908, 178, 179, 190, 191: *The Independent*, Jan. 3, 1907, 35: *Conservation*, Oct., 1908, 558; Jan., 1909, 60: *Cong. Rec.*, Jan. 29, 1907, 1910, 1911: *Collier's*, Apr. 4, 1908, 9.

[52] See large map accompanying.

Several features of this map are worthy of attention. In the first place, it should be observed that the West cast a fairly solid vote against the bill. Several of the central states—Minnesota, Iowa, Missouri, Arkansas, Kentucky, and Indiana—cast strong votes against the measure, largely no doubt because they saw some of the "pork barrel" influences behind it, and perhaps because they felt that legislation of this character could do their section little good. New England cast practically a solid vote for the bill; and the Appalachian sections were gen-

In the upper house, the opposition was led by Senator Burton of Ohio. Senator Burton, like Congressman Scott of the lower house, and indeed like many members of both houses, was undoubtedly actuated by the highest motives in his opposition to what he considered, and with much justice, dangerous "pork barrel" legislation. In the Senate, however, the uselessness of debate seems to have been generally recognized, and after several amendments had been rejected, the bill finally passed on February 15, 1911, by a vote of 57 to 9.

ANALYSIS OF THE FINAL VOTE

As might have been expected from the diversity of motives and arguments entering into the consideration of the bill, the final vote was not clearly drawn along any particular line of cleavage, and cannot be explained as a mere division on the question of conservation. That New England should cast a heavy vote for the measure was to be expected, and it was not strange that the South should have furnished some favorable votes; but it seems rather strange that the Senate, always the stronghold of the anti-conservation forces, should have furnished the strongest majority for the bill. Only three years before this, the Senate had taken away the President's power to create reserves in the Pacific Northwest, and still later had shown a very aggressive hostility to existing reserves. The Senate generally favored the eastern reserves from the very first; and even the western senators, those from the Rocky Mountain and Pacific states, turned out almost a solid vote in favor of the Weeks Bill. Clark of Wyoming was the only man from this section to vote against the bill, although Heyburn was paired against it. It is hard to explain the attitude of some of the western senators toward this bill. One explanation suggested is that these men thought if they could secure the creation of some reserves in the East, they could make the East sick of the reservation policy, and thus ultimately secure the abolition of the western re-

erally favorable. This was of course to be expected, since these were the sections to be benefited by this legislation. The favorable vote of some of the prairie states—South Dakota, Nebraska, and Kansas—was characteristic of the prairie section. The vote of Wisconsin and Michigan may indicate a genuine interest in conservation, or it may indicate that the representatives of these states saw in the passage of the Weeks Bill the inauguration of a policy which might later be extended to the Lake states. Doubtless Wisconsin and Michigan would be glad to have the Federal government step in and reforest some of their waste lands.

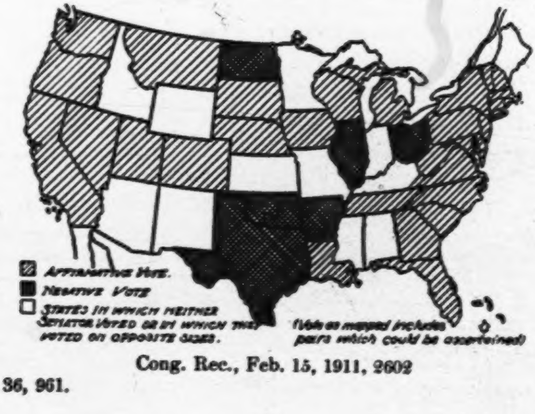
serves. It might easily be suspected that some of the western senators had been pacified with some sort of a political trade—a trade on some irrigation scheme, or on the wool tariff, or on some one of a dozen other things; but men who were in close touch with the proceedings in Congress have insisted that there was no political trade. Perhaps it is more reasonable to assume that the western senators felt they had no particular reason to oppose this measure since it applied to another section of the country.[53]

The House vote and the Senate vote of certain sections of the country differed widely. Thus, while in the Senate the Rocky Mountain and Pacific states cast a strong vote for the bill, in the House they voted three to one against it. So the southern states, while in the Senate almost unanimous in favor of the bill, were in the House almost equally balanced.

PROVISIONS OF THE WEEKS LAW

The Weeks Bill as finally passed[54] appropriated $1,000,000 for the current year and $2,000,000 each year thereafter until June, 1915, for the purchase of forest lands in the southern Appalachian and White mountains. The purchase of these lands was left to a commission—the National Forest Reservation Commission, consisting of the

SENATE VOTE ON THE WEEKS BILL


▨ AFFIRMATIVE VOTE.
■ NEGATIVE VOTE
☐ STATES IN WHICH NEITHER SENATOR VOTED OR IN WHICH THEY VOTED ON OPPOSITE SIDES.
(Vote as mapped includes pairs which could be ascertained)

Cong. Rec., Feb. 15, 1911, 2602

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[54] *Stat.* 36, 961.

Secretary of War, the Secretary of the Interior, the Secretary of Agriculture, two members of the Senate, and two members of the House. Most of the active work of examining and selecting lands for purchase was, however, turned over to the Secretary of Agriculture.

In addition to these provisions, the Weeks Law gave Federal sanction to agreements the states might make among themselves for the protection of forests; and appropriated $200,000 for fire protection, in coöperation with those states which were willing to appropriate an amount equal to that furnished by the Federal government. A rather generous provision gave to the states concerned 5 per cent of the receipts from reserves situated within their boundaries, for the benefit of schools and roads. This was later increased to 25 per cent.

LATER CHANGES

The law had been in force only a short time when it became evident that changes were needed. In the first place, it was found that the commission had not wide enough discretion to deal effectively with lands in which minerals had been reserved, or lands in which the standing timber had been sold but not cut. In other cases, it was found that rights of way had been granted across tracts of lands, and that arrangement had to be made with the owner of the right before purchase could be made.

Some desirable lands were offered for sale on which the water power privileges were very valuable, and, while these lands could be acquired at a reasonable price without the power privileges, the price would have been prohibitive had a sufficient amount been added to cover the value of the power. The law made no provision for the reservation of water power, and apparently the only course was to eliminate from the purchase such land as was required for the proper development of the power. However, this greatly reduced the value to the government of the remaining portions of such tracts, for it admitted of a situation in which private ownership of a strip of land along the narrow bed of a waterway might render it impossible to remove any portion of the timber from the surrounding watershed. The National Forest Reservation Commission wished the law to be so modified as to allow the reservation of water power under its own rules and regulations; and in 1913, this was provided for. At the same time the commission was given greater discretion in dealing with land subject to mineral or timber reservations.[55]

That many owners would try to exact very high prices for their land, was of course to be expected, particularly when they held land which for any reason the commission was especially anxious to secure; but the Attorney-General ruled that the commission had the power under the act of August 1, 1888,[56] to acquire tracts of lands by condemnation, and two years later the Federal District Court of New Hampshire impliedly recognized the validity of this decision.[57]

RESULTS OF THE LAW

In the purchase of lands under the Weeks Law, the National Forest Reservation Commission has proceeded cautiously. In the fiscal year 1911, it approved for purchase only 31,876 acres; in 1912, 255,822 acres; and in 1913, 425,717 acres. It was not until 1913 that the entire annual appropriation was used. Of the total 1,501,357 acres approved prior to June 30, 1917, 792,835 acres were cut-over or culled timber land, and 384,195 acres were virgin timber land. The average price paid was about $5 per acre, which would indicate that the virgin timber was of decidedly poor quality. Most of the land approved for purchase is situated in the Appalachian Mountains; in Virginia, West Virginia, North and South Carolina, Georgia, Alabama, and Tennessee; but nearly 350,000 acres has been selected in the White Mountains of New Hampshire, and a small amount in Maine. The passage of hostile legislation by the legislature of Georgia in 1917 led the Reservation Commission to discontinue purchases in that state until the legislation should be repealed.[58]

The results of the Weeks Law have thus been very modest, the total approved for purchase being less than 1 per cent of the total forest reserve area, but it seems probable that the ultimate results of the policy it has inaugurated will be very important. There are several reasons why private initiative cannot usually be depended upon to undertake the reforestation of cut-over lands. In the first place, the

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[55] S. Doc. 137; 62 Cong. 2 sess., 2, 3: *Stat.* 37, 855.

[56] *Stat.* 25, 357.

[57] S. Doc. 137; 62 Cong. 2 sess.: U. S. vs. Certain Lands; 208 Fed. Rep., 429.

[58] S. Doc. 137; 62 Cong. 2 sess.: S. Doc. 307; 63 Cong. 2 sess.: H. Doc. 564; 65 Cong. 2 sess.: *Southern Lumberman*, Dec. 15, 1917, 33.

3 reasons

time required for the growth of a forest crop is longer than most individuals can or will wait for financial returns; in the second place, danger of fire makes such an investment somewhat risky; and in the third place, in a few instances at least, an irrational system of taxation has prevented private capital from engaging in this work. We may take little pride in a transaction whereby the government buys up for $5 per acre land which was sold for less than half that amount, or given away, or turned over to perjured entrymen; nevertheless, it is to our Federal government that we must eventually look for forest planting and forest management; and under the Weeks Law a work is being inaugurated which must grow vastly in magnitude if the future interests of the nation are to be conserved.[59]

[59] *Report*, National Conservation Commission, II, 633 et seq.

CHAPTER VII

THE UNRESERVED TIMBER LAND SINCE THE PASSAGE OF THE FOREST RESERVE ACT

THE act of 1891, providing for the establishment of forest reserves, resulted in the separation of timber lands into two classes, reserved and unreserved. The history of the reserved timber lands has been traced; and it will now be necessary to return to the consideration of the unreserved public lands. This will involve, in general, an account of the Timber and Stone Act and the free timber acts, with some consideration of state activity in regard to forest conservation, and some attention to the later developments regarding railroad land grants.

THE TIMBER AND STONE ACT ONCE MORE

It will be remembered that the Timber and Stone Act proved a most pernicious statute, and that, in response to repeated recommendations for its repeal, Congress had, in 1892, merely extended its provisions to all public land states.[1]

The early abuses under the act have already been described, and they were not different after 1892, except that they were no longer confined to the coast states. In a case brought to light near Duluth, Minnesota, a certain timber speculator hired twenty-five entrymen to take up lands, furnishing them with all expense money, including $500 each for payment to the government. This timberman hired a lawyer to instruct his entrymen as to how they should answer questions, and paid the latter $50 each for their services.[2] In the Susanville and Redding districts of California, a single investor, Thomas B. Walker of Minneapolis, in the course of about three years, acquired approximately 700,000 acres of the immensely valuable sugar pine and western pine timber land, securing a large amount of it under the Timber and Stone Act.[3]

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[1] Cross Reference, pp. 70-78.

[2] Olson vs. U. S.; 133 Fed. Rep., 1849, 1850, 1851.

Trainloads of women school-teachers were officially reported to have been shipped from Minnesota out to Oregon to enter lands under this act. The lands entered were then transferred to a certain corporation in Minneapolis, the organization of which was very peculiar indeed. Only the president, C. A. Smith, a wealthy lumberman of Minneapolis, owned any stock; and the other officers in the corporation—vice-president, secretary, and treasurer—were his wife, son, and daughter, respectively. S. A. D. Puter, author of "Looters of the Public Domain," was Smith's agent in securing much of his timber land, but Puter became dissatisfied with the treatment he received, and published the details of Smith's transactions, with the result that Smith was indicted by the Federal government and some of his patents cancelled.[4]

No residence or cultivation being required, it was easy for non-resident timber speculators to secure title under the Timber and Stone Act, and the amount of land taken up increased greatly during the first few years of the twentieth century. This is shown by the following table, compiled from the reports of the Commissioner of the Land Office:

Year	No. Acres	Year	No. Acres[5]
1891	259,913	1902	545,253
1892	137,539	1903	1,765,222
1893	182,340	1904	1,306,261
1894	158,081	1905	696,677
1895	70,066	1906	647,997
1896	66,182	1907	1,444,574
1897	40,609	1908	1,437,431
1898	60,955	1909	722,893
1899	59,019	1910	170,989
1900	300,019	1911	148,456
1901	396,445	1912	17,295

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[3] "Lumber Industry," II, 91.

[4] *Report*, National Conservation Commission, III, 389: 181 Fed. Rep., 545: 196 Fed. Rep., 593. See also Williamson vs. U. S.; 207 U. S., 425: S. Doc. 189; 58 Cong. 3 sess., 26.

[5] The comparatively small amount of land taken up during the six years begin-

In thirty-five years of its operation, from 1878 to 1913, this act resulted in the sale of over 12,000,000 acres of timber lands, the government receiving the sum of $30,000,000 for lands worth much more than that, while most of the profit was divided among dishonest timber speculators and perjured entrymen. Not over a fractional part of 1 per cent of the timber purchased under the act is now held by the men and women who made the entries.[6]

The evil effects of the law were repeatedly pointed out. In 1897, the committee appointed by the National Academy of Sciences reported: "The act has been used by corporations and wealthy individuals to secure fraudulently . . . most of the valuable redwood lands of the California coast region, and great bodies of the Sequoia and sugar pine forests of the Sierra Nevadas, and much of the best timber lands on Puget Sound."[7] In the same year, the Secretary of the Interior, C. N. Bliss, stated: "The calamitous results predicted and anticipated by the Land Department . . . have been fully verified and realized."[8] Four years later, Secretary Hitchcock announced that this act, together with the Free Timber Act, would "result ultimately in the complete destruction of the timber on unappropriated and un-

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ning with 1893 is doubtless explained by the depression following the crisis of 1893. (S. Doc. 130; 57 Cong. 2 sess.) The very great increase beginning in the year 1900 was probably due mainly to the speculative boom in the purchase of timber lands during these years. The value of timber lands was rising rapidly, and speculators were picking up tracts in every way possible; and the Timber and Stone Act was one of the cheapest means of acquiring timber lands in the West. Furthermore, it seems at least possible, although at first blush very strange, that the energetic administration during these years had something to do with the increase in Timber and Stone entries. Timber lands had been fraudulently acquired, not only under the Timber and Stone Act, but under the Commutation Homestead Law, the Forest Lieu Act, and in various other ways. Secretary Hitchcock had the will and the funds to suppress frauds wherever possible, and it was possible to suppress, in some measure, the abuses arising under most of these acts. For instance, an examination of the homestead entry would indicate its fitness or unfitness for agriculture, and so reveal any attempt to get timber lands through a dishonest use of the Homestead Act. Frauds under the Timber and Stone Act were, however, very difficult to prove, as has been shown in the case of United States vs. Budd (144 U. S., 154), and perhaps when the administration became so vigilant that the Homestead and other laws were no longer available for the acquisition of timber lands, speculators were driven to use the Timber and Stone Act even more than before.

[6] "Lumber Industry," I, XVIII.

[7] S. Doc. 105; 55 Cong. 1 sess.

[8] *Report*, Sec. of Int., 1897, XV.

reserved public land."[9] Almost every report of the Secretary of the Interior and of the Commissioner of the Land Office pointed out the evil results of the act and asked for its repeal. Periodicals described the frauds perpetrated under the act and recommended its repeal.[10] The Public Lands Commission stated in 1904: "The repeal of the Timber and Stone Act will unquestionably cure the most obvious defect in the administration of the public lands"; and the next year this commission again urged the repeal of the law.[11] In 1906, a committee of the National Board of Trade quoted reports of the Secretary of the Interior showing the evils of the act.[12] In 1909, the National Conservation Commission said: "It is clear that the Timber and Stone Act does not fulfill the purpose for which it was passed, and that it should be repealed."[13] Of course the American Forestry Association constantly worked for the repeal of the act.[14]

President Roosevelt and Gifford Pinchot were well aware of the evils of this law, and did all in their power to secure its repeal. In 1906, Roosevelt sent a special message to Congress, calling attention to the unsatisfactory condition of affairs, and on the same day, he directed the Secretary of the Interior to allow no further patents to be issued until entries had been carefully examined and actual compliance with the law clearly shown.[15] This action of course stirred up a great deal of opposition in the West, but Roosevelt stood firmly by his order, and called for an appropriation of $500,000 with which to carry it out.[16] President Taft also sent a special message to Congress in 1910, asking for the repeal of this act.[17]

FURTHER EXTENSION OF ITS PROVISIONS

The response of Congress to these urgent recommendations constitutes one of the numerous discreditable chapters in the history of the public lands. For many years, scarcely a single attempt was made to abolish the law or to improve it in any way, while in almost every Congress, bills were introduced to relieve purchasers,[18] or to liberalize and extend the provisions of the act.

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[9] *Report*, Sec. of Int., 1901, LXV. In November, 1892, Hitchcock ordered the investigation of all entries made under the act, in Oregon, California, and Washington; and nearly 10,000 entries were suspended. (*Report*, Sec. of Int., 1903, 316.)

[10] *Outlook*, Feb. 1, 1908, 239: *Atlantic Monthly*, July, 1908, 6.

[11] S. Doc. 189; 58 Cong. 3 sess., V, XVII.

[12] *Forestry and Irrigation*, Jan., 1906, 49.

[13] S. Doc. 676; 60 Cong. 2 sess., Vol. I, 87.

[14] *Forestry and Irrigation*, Jan. 1907, 14.

[15] S. Doc. 141; 59 Cong. 2 sess.

[16] S. Doc. 310; 59 Cong. 2 sess.

[17] *Cong. Rec.*, Jan. 17, 1910, 682.

The Timber and Stone Act originally applied only to unoffered land in *four* of the states; and after the act had been extended to *all* of the public land states, the most obvious next step was to make it apply to *offered* as well as *unoffered* land. Congress was not slow to move in this direction. In the fifty-third Congress, in Cleveland's second administration, the House Committee on Public Lands introduced a bill to authorize the sale of offered as well as unoffered lands,[19] and, in spite of the disapproval of the Secretary of the Interior and the Commissioner of the Land Office, the bill passed both Houses of Congress without a word of opposition.[20] President Cleveland did not sign it, but in the next Congress, Representative Lacey of Iowa brought up another bill of similar design.[21] This time, Secretary Hoke Smith and Commissioner Lamoreux approved the proposal, these two officials having apparently experienced a change of heart in regard to the Timber and Stone Act.[22] The bill was favorably reported by the Committee on Public Lands, but got no further.

In the next Congress, a House bill introduced by McRae of Arkansas, "To abolish the distinction between offered and unoffered lands," was favorably reported by the Committee on Public Lands, but received no further consideration.[23] The object sought was accomplished during this session, however. Another bill, providing for the

[18] S. 2275, H. R. 9790; 52 Cong. 2 sess.: H. R. 4726, H. R. 7259; 53 Cong. 2 sess.: S. 1349, H. R. 14, H. R. 4065; 54 Cong. 1 sess.: H. R. 9923; 54 Cong. 2 sess.: S. 886; 55 Cong. 1 sess.

[19] H. R. 7259.

[20] H. Report 988: *Cong. Rec.*, July 24, 1894, 7834; Feb. 26, 1895, 2783.

[21] H. R. 4442; 54 Cong. 1 sess. Lacey's attitude toward the Timber and Stone Act seems somewhat strange. On most other public land questions, particularly the question of forest reserves, he always took a firm stand for conservation. He could hardly have been ignorant of the gross abuses which had arisen under the Timber and Stone Act, yet he made various attempts to extend its operation. It will be noted later that he afterward changed his attitude, and tried to secure the repeal of the act. (*Cong. Rec.*, Dec. 5, 1905, 112.)

[22] H. Report 137; 54 Cong. 1 sess.

[23] H. R. 5877, H. Report 130; 55 Cong. 2 sess.

sale of public lands in Missouri,[24] had passed the Senate, and when it came up in the House, Lacey offered an amendment providing also for the abolition of the distinction between offered and unoffered lands. This amendment was agreed to in both houses without opposition, and, no Grover Cleveland being in the President's chair, it became a law on May 18, 1898.[25]

It might seem that the Timber and Stone Act had now been extended as far as the most enterprising timber speculator could have wished, but during the next few years, Lacey made efforts to extend the provisions of the act to Alaska.[26] In 1900, a bill for that purpose was favorably reported by the House Committee on Public Lands;[27] but nothing further was accomplished.

UNSUCCESSFUL EFFORTS TO REPEAL OR AMEND THE TIMBER AND STONE ACT

In 1900, Commissioner Binger Hermann sought to limit the evil effects of the Timber and Stone Act by providing for the sale of timber without the land, just as in the forest reserves. He drafted a bill for this purpose and Hitchcock sent it to the Speaker of the House, but it was lost in the Committee on Public Lands.[28]

The first efforts to repeal the Timber and Stone Act were of course made by eastern men. In 1902, Representative Power of Massachusetts introduced a bill providing for the repeal of the act,[29] but it was never reported. A Senate bill, introduced the same day by Quarles of Wisconsin, to repeal the Timber and Stone and several other acts, fared somewhat better, receiving a favorable report from the Committee on Public Lands.[30] In this bill, the question of timber land sales was so intermingled with other public land questions, however, that the report was of very limited significance as far as it concerned the Timber and Stone Act; especially since a dissenting minority report was also made.

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[24] S. 1586.

[25] *Cong. Rec.*, May 3, 1898, 4526; May 5, 1898, 4628: *Stat.* 30, 418.

[26] H. R. 9291; 56 Cong. 1 sess.: H. R. 12117; 57 Cong. 1 sess.

[27] H. Report 568; 56 Cong. 1 sess.

[28] H. Doc. 497; 56 Cong. 1 sess.

[29] H. R. 15509; 57 Cong. 2 sess.

[30] S. 6363, S. Report, 3166.

During the next two years, Quarles, and also Hansbrough of North Dakota, made efforts to secure a law providing for the sale of timber without the land, but without success.[31] This would of course have curtailed somewhat the operation of the Timber and Stone Act, although it would not have been equivalent to a repeal of the act. One bill introduced by Quarles was favorably reported by the Committee on Public Lands,[32] and, the western men being pacified by an amendment turning the proceeds of timber sales into the reclamation fund, this bill passed the Senate without opposition. It was, however, never considered in the House.[33]

The speeches ~~which~~ indicate most clearly the attitude of the Senate toward the Timber and Stone Act, were made in the consideration of an omnibus public land bill, after the above measure of Quarles had already passed the upper house. In 1904, Gibson of Montana introduced a bill to repeal several public land laws, including the Timber and Stone Act, and the Timber and Stone section was discussed at considerable length.[34] Gibson himself, although a western man, spoke in no uncertain terms of the great evils which had arisen under the act.[35] "Although this act has been in force twenty-five years," he said, "during which time the attention of Congress has been repeatedly called in the most urgent manner to the unlawful disposition of the public timber lands made possible by it, the act still stands on the statute book, a monument to the wastefulness and the injustice of our national land policy." Hansbrough agreed with Gibson as to the need of repeal, but he feared that, unless another law were passed providing for the sale of timber, the repeal of the Timber and Stone Act would simply be playing into the hands of big timber owners, who would find their own holdings advanced in value by the limitation of the supply of timber available for the market. Hansbrough even asserted that an organization of the lumber interests, with headquarters in Washington, was working hard for the repeal of the law.[36] Dubois of Idaho feared that the scrip holders would be the chief beneficiaries of a repeal of some of the land laws. As he explained: "The great trouble with us in the West is not the land laws. The great difficulty that we encounter now is the scripping of land. . . . Almost all of this scrip is owned by the railroad corporations. The difficulty that we encounter is the danger from the scripping of these lands by the railroad corporations or by people who buy the scrip from them. . . . I am suspicious sometimes that the owners of this scrip are pressing for the repeal of these beneficent land laws. It is apparent that if all the land laws, except the homestead, were repealed and the commutation clause of the Homestead Act done away with, the scrip would become vastly more valuable." Without a doubt Dubois was honest, and even fairly accurate, in his description of the scrip situation in the West.

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[31] S. 370, S. 932; 58 Cong. 1 sess.: S. 4916, S. 5054; 58 Cong. 2 sess.

[32] S. Report 1535; 58 Cong. 2 sess.

[33] *Cong. Rec.*, Mar. 17, 1904, 3376. It has been stated that Thomas B. Walker appeared before the House Committee on Public Lands, and that as a result of his influence only two members of the committee voted for the bill. Walker, it will be remembered, used the Timber and Stone Act a great deal in the acquisition of lands, and no doubt was opposed to any repeal of the law or any provision which would interfere with its use. (*Proceedings*, Am. Forestry Congress, Jan. 1905, 339.)

[34] S. 5168; 58 Cong. 2 sess.

[35] *Cong. Rec.*, Mar. 24, 1904, 3606.

Newlands of Nevada favored the repeal of the act,[37] although he devoted most of his attention to the matter of irrigation. Clark of Wyoming was very desirous that nothing should be done to "interfere with the development of the West"; and, like Dubois, he declared that an insistent lobby of scrip holders was the main influence behind the bill.[38] "Never in the history of public land legislation," he asserted, "has there been such a determined and such an insistent lobby as has been behind this proposition for the last three years to repeal the land laws of the United States. It is no secret that they have a bureau established here in this city for that purpose. It is no secret that they maintain a weekly organ of publication devoted to this and to this alone. It is no secret that one of the greatest of these holders boasted in a public speech at a banquet within the last two months that his company alone had contributed $25,000 to this propaganda." Like Newlands, Clark was more interested in other matters than in the Timber and Stone Act, but he evidently did not favor its repeal. Senator Warren opposed absolute repeal of the act unless some other law were passed, permitting the sale of timber.[39]

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[36] *Cong. Rec.*, Mar. 25, 3662, 3663, 3665, 3666.

[37] *Ibid.*, 3668, 3669.

[38] *Ibid.*, Mar. 31, 4032.

[39] *Ibid.*, Apr. 2, 4144. During these discussions frequent reference was made, by

It thus appeared that, while a few of the western men actively opposed the repeal of the Timber and Stone Act, others asserted that they were merely opposed to repeal unless another law for the sale of timber could be secured in its place. But most of the men, even in the latter class, probably did not want the act repealed, because they could never have been persuaded to vote for a general timber sale law to take its place. That had been demonstrated in Congress over and over again. Whenever a timber sale bill came up, most of the western men began to talk about the injustice that would be done to the "poor settlers" and miners, if they had to buy the timber they wanted. Furthermore, many of the men, even from other sections of the country, had shown entire inability to see the logic of selling the timber without the land. Thus there was little likelihood that Congress would provide for the sale of timber in the public domain, and therefore little likelihood that any considerable number of western men could be brought to favor the repeal of the Timber and Stone Act. No doubt if the issue had been presented squarely, it would have been strongly opposed by such men as Teller, Clark, and Fulton, and it is hardly likely that it would have received a favorable vote. It is true that the bill introduced by Quarles, accomplishing somewhat the same end, had passed the Senate, but in that case the sop of an addition to the reclamation fund had been used to secure the support of the West.

Hansbrough and others, to the good old days when Teller was Secretary of the Interior, and to the later administration of Cornelius N. Bliss; and it was stated that Teller was the only secretary in many years who "knew anything about the public land system from practical experiences," while Bliss was referred to as a "great executive officer" who never became "hysterical over alleged land frauds." The inference was, of course, that Hitchcock was hysterical in his enforcement of the land laws. Hitchcock was doing some of his best work in the prosecution of land and timber thieves at this time, and these criticisms were wholly baseless. It seems that throughout the history of the public lands, the honesty and efficiency of officials in the Land Department were in no way so accurately indicated as by the amount of criticism they received at the hands of politicians from the West. As Pinchot once expressed it: "It is the honorable distinction of the Forest Service that it has been more constantly, more violently and more bitterly attacked by the representatives of the special interests in recent years than any other government bureau. The attacks have increased in violence and bitterness just in proportion as the service has offered effective opposition to predatory wealth. The more successful we have been in preventing land grabbing and the absorption of water power by the special interests, the more ingenious, the more devious, and the more dangerous these attacks have become." (*Cong. Rec.*, Jan. 6, 1910, 336.)

Perhaps, after all, it is not so important to speculate upon what might have happened, as it is to note what really did happen. After several days of debate, the bill was referred to the Committee on Public Lands, and it never emerged from that committee.[40]

THE SUSPENSION OF TIMBER AND STONE ENTRIES IN 1906

For several years, there seemed to be very little interest in the Timber and Stone Act. In 1905, Lacey, who had changed his mind in regard to this act, brought in a bill for its repeal, but the bill was never reported.[41] In 1906, the action of Roosevelt and Hitchcock in suspending the issue of all patents under this and other public land laws,[42] immediately aroused a spirited discussion in Congress. In January, 1907, Senator Carter of Montana introduced a resolution into the Senate to compel the issue of patents in all cases where there was no evidence of fraud,[43] and somewhat later made a long and stirring speech against the "harsh, cruel and oppressive" order of the secretary, and against Hitchcock personally. "For the last six years sensational reports of evil doings in the public land states have been emanating from the Interior Department from day to day, so sweeping in their scope as to create the impression in other sections that the entire western population is, and has been, engaged in a veritable saturnalia of criminal conspiracy, fraud, and perjury, over the whole broad surface of the public domain," said Carter. "Since 1901 insidious interviews and boisterous proclamations have passed from the Interior Department to the public press, reflecting upon all those seeking title to the public domain. The words 'grafters,' 'land grabbers,' 'conspirators,' 'looters of the public domain,' and like terms have become a part of the vernacular of the secretary's office in referring to public land entrymen of all kinds. The routine work of the Land Service has been pillaged in quest of items for publication, reflecting on individuals and communities. The slightest irregularity savoring of scandal or possible sensation has been diligently exploited. . . . Everyone was indicted and no acquittals were ever recorded in these scandalous reports. The exploitation of evil reports has been a conspicuous feature of the present secretary's administration. Fraud has been constantly and vociferously shouted from the house tops. . . . On the assumption that our settlers are land thieves in the main, the most odious, oppressive, and exasperating treatment has been meted out to them in numerous cases for the last five or six years. . . . Should some morbid delinquent pay nightly visits to the dens of vice and make morning calls at the police courts in all your splendid eastern cities, and then announce to the world from day to day with loud acclaim, that crime and moral leprosy overwhelmed you all, he would, at his pitiable best, play in your field the part the Secretary of the Interior and his cohorts have played as regards the people of the public land states for the last six years."[44]

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[40] *Cong. Rec.*, Apr. 12, 1904, 4672.
[41] H. R. 3019; 59 Cong. 1 sess.
[42] S. Doc. 141; 59 Cong. 2 sess.
[43] *Cong. Rec.*, Jan. 9, 1907, 804.

Carter laid the entire responsibility for the "indefensible" order upon Secretary Hitchcock rather than upon Roosevelt, who "had been deceived and alarmed" by the reports of the secretary. "The President and all others misled by the crusade of misrepresentation," he declared, "are clearly free from responsibility."

Later the same day, Heyburn arose in the Senate and undertook to show by a citation of authorities that the President had no legal power to issue the order staying the issue of patents, and to prove further that the President's concern at the "extremely unsatisfactory condition of the public land laws"[45] was without foundation. "Those laws are older than the public experience of any man in this body," he said.[46] "There is slight ground for complaining of the land laws. There never was a more perfect system of settlement, the building up of states, conceived by mortal man than is embodied in these land laws." This of course referred to the land laws generally, but Heyburn specifically approved of the Timber and Stone Act, although he considered that the 160 acres which could be taken up under its provisions was too much.[47]

Senator Heyburn was not contented with discussing the issues involved, but wandered off into a criticism of the "vicious system of forest reserves,"[48] and fell into some rather obvious inconsistencies in that discussion. He made much fun of the National Forestry Association, asserting that a vice-president of that organization (Frederick Weyerhaeuser) owned more land that had been obtained by fraud than any other man in the United States.[49] At this point, Smoot of Utah suggested that such holdings as Weyerhaeuser's were impossible where forest reserves had been established, and Newlands predicted that if the timber lands in forest reserves were ever thrown open to entry under the Timber and Stone Act, they would very soon be taken up by wealthy timbermen. Unquestionably the result which Newlands foresaw would have followed the opening up of the forest reserves, but Heyburn denied it. He said that if the Timber and Stone Act were enforced, as it "easily could be," fraud and concentration of ownership would not follow.

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[44] *Cong. Rec.*, Jan. 30, 1907, 1934 et seq. Carter, like Heyburn at other times, even entered the field of magazine writing in his fight against the reserves. (*Independent*, 60, 667: *Leslie's Weekly*, Oct. 27, 1910.)

[45] S. Doc. 141; 59 Cong. 2 sess.

[46] *Cong. Rec.*, Jan. 30, 1907, 1960.

[47] *Ibid.*, 2019.

At almost every point, Heyburn, like Fulton, Carter, Mondell, Teller, and some other western anti-conservationists on similar occasions, took about the most illogical attitude possible.[50] He affected a great antipathy for the great lumber monopolies, and yet, on almost every question, he played into their hands. Had his views always prevailed, there is no doubt that practically all of the timber lands of the West would now be in the hands of large timber companies. The preservation of a portion of the public timber lands from the grasp of speculators and timber companies has been due to two things: the creation of the forest reserves, and the enforcement of the public land laws. To both of these, Heyburn was unalterably opposed. He never missed an opportunity to attack the forest reserves, and when Roosevelt and Hitchcock began a vigorous enforcement of the land laws, Heyburn immediately flew to arms. On the other hand, one of the best tools in the hands of the timber companies was the Timber and Stone Act. Heyburn approved of that act. It is true that he opposed the Forest Lieu Act, a really injurious statute, but instead of directing his efforts toward the repeal of the act itself, he aimed most of his venom at the forest reserves.

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[48] *Cong. Rec.*, Jan. 30, 1907, 2021.

[49] *Ibid.*, 2200.

[50] For an exposition of Heyburn's methods in debate, see *Forestry and Irrigation*, Aug., 1908, 445-447. It has been asserted that he did not have the support even of the press in his own section of the country, but it is doubtful if this is true. (*Forestry and Irrigation*, Sept., 1906, 394.)

No doubt Roosevelt's order of withdrawal and the opposition aroused by it were among the influences which caused the abolition of the President's power to set aside reserves, but otherwise no result accrued from these rather extended debates. The Timber and Stone Act was not touched.[51]

Within a year or two after this, almost all of the public timber lands of any value outside of the forest reserves had been taken up,[52] so that the question of repealing the Timber and Stone Act was of small and constantly decreasing importance. Most of the efforts in that direction did not seek repeal of the act itself, but merely aimed to provide for the sale of timber without the land. Representative Reeder of Kansas introduced a bill in 1908 for this purpose, but the main object of his measure, as of the bill which had passed the Senate several years before,[53] was not to protect the public timber lands, but to secure an addition to the reclamation fund.[54] In 1910, Senator Nelson of Minnesota, in response to a special message from President Taft, introduced nine bills relating to the public land laws, one of them providing for the sale of timber,[55] but nothing ever came of this bill. Gronna of North Dakota introduced a similar measure into the House, and later one into the Senate, but neither was reported.[56]

SALE OF BURNED TIMBER

In 1910, the question of timber sales came before Congress in a new way. The summer of 1910 was very hot and dry, and terrible forest fires in the West burned over vast areas of timber land. The burned timber would of course only rot if not disposed of, and agitation soon arose for a law permitting the sale of such timber. Bills were brought into Congress by several representatives from the public land states—Mondell, Pray of Montana, and Robinson of Arkansas;[57] and in 1913, after the burned timber had been given time to rot, a law was finally secured authorizing the Secretary of the Interior to sell at public auction any timber outside of the national forests killed or damaged by forest fires.[58] This is as far as Congress ever went in the sale of timber on the general public domain. The Timber and Stone Act is still on the Federal statute books; and the Secretary of the Interior reported 575 timber and stone entries patented in 1916.

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[51] It is worthy of note that Roosevelt did not hide behind his secretary on this occasion, but took upon himself the responsibility of defending the order of withdrawal and the general policy of the administration. "I wish to express my utter and complete dissent from the statements that have been made as to there being but a minimum of fraud in the actual working of our present land laws," he said in a special message to Congress a few days after these debates. He went further to show by tables that in four districts selected for consideration, 2300 cases had been examined and in over half of them the law had not been complied with. (S. Doc. 310; 59 Cong. 2 sess.)

[52] *Report*, Land Office, 1909, 21.

[53] S. 5054; 58 Cong. 2 sess.

[54] H. R. 21140; 60 Cong. 1 sess.

[55] S. 5489; 61 Cong. 2 sess.

[56] H. R. 23698; 61 Cong. 2 sess.: S. 1586; 62 Cong. 1 sess.

TIMBER SALES WITHOUT LEGISLATIVE AUTHORIZATION

Congress thus never authorized the sale of timber, except burned timber, on the unreserved lands;[59] but in 1898, the Department of the Interior attempted such sales, under the Permit Act of 1891.[60] The Permit Act merely authorized the issue of free timber permits, under such regulations as the Secretary of the Interior should provide.[61] A "regulation" requiring payment for this "free" timber seems hardly included within the meaning of the law, yet the secretary acted on the theory that this was permissible, and a few small sales were made.[62] After two or three years' experience with this system, however, the department awakened to the *ultra vires* character of the business, and the regulation providing for sales was repealed.[63]

Thus the history of the Timber and Stone Act after 1891 was in almost every respect like the history of that act in the previous period. It was a means of gross frauds, resulting in the concentration of timber ownership in the hands of speculators and large timber companies; its iniquitous effects were constantly brought to the attention of Congress, and Congress, in response to repeated recommendations for its repeal, Congress merely extended its evil provisions. It will now be necessary to return to the consideration of the free timber acts, and follow out their history after 1891.

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[57] H. R. 29711; 61 Cong. 3 sess.: H. R. 8783, H. R. 4695, H. R. 11475; 62 Cong. 1 sess.: H. R. 24266; 62 Cong. 2 sess.

[58] *Stat.* 37, 1015.

[59] See however, *Stat.* 30, 414.

[60] "Land Decisions," 26, 399, 404.

[61] *Stat.* 26, 1093, 1094.

[62] *Reports*, Land Office; 1898, 101; 1899, 127; 1900, 107.

[63] *Report*, Land Office, 1901, 98.

THE FREE TIMBER ACTS AGAIN

It will be recalled that, in the General Revision Act of 1891, Congress had left the Free Timber Act of 1878 untouched, and had passed another more generous free timber act, known as the Permit Act, which provided free timber on the entire public domain, in Colorado, Montana, Idaho, North Dakota, South Dakota, Wyoming, Alaska, and the gold and silver regions of Nevada and Utah, not only for mining, agricultural, and domestic purposes, but also for *manufacturing*.[64] Thus after 1891, there were two acts providing free timber on the public domain.

In the years after 1891, just as before, the Free Timber Act of 1878 continued to serve as the means whereby large corporations, lumber dealers, and railroad contractors cut timber for all sorts of purposes. The evils arising under the law would not have been very serious had it been possible to confine the cutting to mineral lands; but lumbermen, and even courts and juries, naturally showed a tendency to construe the law very liberally. The true interpretation, as already pointed out, limited the application of the act to land containing mineral in sufficient quantity to "justify expenditure for its extraction, and *known to be so*."[65] The bias of some of the western courts is well illustrated by the instructions given a jury in an Idaho case ten years after the Supreme Court of the United States announced the true interpretation. The Idaho court construed the act to allow the cutting of "all timber in the neighborhood of mines, or within such distances from them as to make it convenient for their use, *whether mineral is actually found in the ground or not*." These instructions also included as mineral "all ground or country of such character, and so situated with reference to other lands known to contain mines, *that miners would prospect it with the expectation of finding mines*."[66] Such a construction as this was a license to cut practically all of the unreserved timber in the vicinity.

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[64] *Stat.* 26, 1093, 1099. Cross Reference, pp. 68-70.

[65] Davis vs. Weibold; 139 U. S., 507, 519.

[66] Quoted in *Report*, Land Office, 1901, 97.

Many examples might be given to show the extent of the abuses under this act. The Old Dominion Copper Mining and Smelting Company of Arizona, for instance, cut several million feet of lumber in 1900 and 1901 from land never proved to be mineral.[67] A company in the Black Hills of South Dakota built and for years operated a railway extending nearly forty miles into the public domain, for the purpose of bringing lumber and fuel to its mines, from land never shown to be mineral; and, according to reports, shipped millions of feet of lumber to Omaha for sale there.[68] It has been claimed that, owing to a rule of the Department of the Interior granting permits to cut dead and down timber, large areas were burned over year after year in order to kill the timber, that railroads followed the paths of such fires, building merely to accommodate the traffic in burned timber; that sawmills were built and a supply of material provided for them by systematic burning.[69]

The Permit Act was at first perhaps even more destructive in its effects than the Free Timber Act, because its provisions were more extravagantly liberal. By allowing free timber for *manufacturing* purposes, it practically gave away, subject to the regulations of the Secretary of the Interior, for all purposes except export, as much lumber as anyone happened to want to take. In the first six years of its operation, nearly 300 permits were issued, granting to mining and lumber companies about 300,000,000 feet of lumber. Some of the grantees—notably the Big Blackfoot Milling Company, the Bitter Root Development Company, and the Anaconda Mining Company—secured permits at different times to cut many million feet.[70] The Anaconda Mining Company for years consumed an annual average of probably more than 250,000 cords of wood and 40,000,000 feet of lumber, and supplied not only its mines and smelters with timber cut from the public lands, but established lumber yards in different towns, where not less than 50,000,000 feet of timber was sold annually.[71] Part of this timber was secured under the provisions of the Permit Act.

[67] Quoted in *Report*, Land Office, 1901, 97, 98.

[68] S. Doc., 105; 55 Cong. 1 sess.

[69] *Proceedings*, Society of Am. Foresters, Nov., 1905, 59.

[70] *Report*, Land Office, 1897, 76.

[71] *Ibid.*, 77. In 1900, the Secretary of the Interior adopted regulations prohibiting the use of free timber for smelting purposes. ("Land Decisions," 29, 571, 572.)

The clause providing for regulation by the Secretary of the Interior seems to have been of little avail at first, but in 1898, Secretary Bliss adopted regulations which greatly restricted the abuses arising under the law. The policy of granting permits to millmen for large quantities of timber was abandoned, permits were restricted to the use of settlers, and the amount of timber given was limited to $100 worth annually.[72] This policy immediately resulted in a great reduction in the number of permits sought. Thus in 1898, only thirty-six permits were asked for, whereas six years before, 425 applications had been received.[73]

The two free timber acts together always constituted an agency most destructive of the public timber, however, and their evil effects were pointed out by the officers of the Department of the Interior, by the committee of the National Academy of Sciences,[74] and in 1910, by President Taft in a special message to Congress.[75] Almost every annual report of the Secretary of the Interior and of the Commissioner of the Land Office called for the modification or repeal of one or both of these acts. The response of Congress to these repeated complaints and recommendations was about the same as had been its response to complaints regarding the Timber and Stone Act.

FURTHER EXTENSION OF FREE TIMBER PRIVILEGES

A total repeal of all free timber privileges was hardly to be expected, or even desired, for the free timber acts provided the only way by which settlers could get timber from the unreserved public lands. A repeal of all such provisions would have called for some law authorizing the sale of timber; and even had sale been authorized, it would probably have been unwise to abolish all free timber privileges. Such action would certainly have aroused great opposition in the West, and the conservation cause might have suffered a serious check. The provision granting free timber for manufacturing purposes, however, should certainly have been abolished. The fact that Secretary Bliss' regulations of 1898, restricting permits to settlers, resulted in so greatly reducing the number of applications, indicates that settlers) were not the main beneficiaries under the free timber acts.

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[72] *Report*, Land Office, 1898, 100, 101.

[73] *Report*, Land Office; 1893, 77; 1895, 85; 1898, 100.

[74] S. Doc., 105; 55 Cong. 1 sess.

[75] *Cong. Rec.*, Jan. 17, 1910, 682.

The Permit Act of 1891 had not been in operation a year before certain members of Congress undertook to extend its provisions to other states, and in April, 1892, Delegate Smith of Arizona brought in a bill to extend the provisions of the act to Arizona and New Mexico.[76] This bill was favorably reported in the House, passed both houses without a word of opposition, and was signed by President Harrison.[77] In the next year, Senator Squire of Washington introduced a bill extending the Free Timber Act to eastern Oregon, but it was not reported.[78] In 1894, Representative Houk of Tennessee introduced another free timber act, applying to the entire public domain, but it also failed in committee.[79] For several years, the question received little attention, but in 1900, an effort was made in both houses of Congress to secure free timber for the coast states by means of an extension of the Permit Act. Moody of Oregon introduced the measure into the House, and Senator Simon of the same state brought it up in the Senate.[80] The House bill was never reported, but the Senate bill passed both houses without opposition,[81] and became a law on March 3, 1901.[82]

It was the Oregon delegation in Congress that was always most anxious for the further extension of free timber privileges. Nearly all of the bills introduced after the year 1900 were fathered by men from that state; and the extension of the Permit Act in 1901 was not enough to satisfy these men, for efforts were very soon resumed to secure still further free timber privileges for the coast states. In 1903, Representative Williamson of Oregon introduced two bills to amend the Free Timber Act.[83] The next year, Senator Mitchell of that state brought up a bill to provide free timber for Oregon, Washington, and California.[84] Senator Fulton reported it favorably from the Committee on Public Lands, and it passed the Senate without comment,[85] but never came up in the House. The next year, Senator Fulton introduced a bill into the Senate to extend the Free Timber Act to the coast states, but it was never considered.[86] From 1905 to the present time, little effort has ever been made to secure a further extension of free timber privileges.

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[76] H. R. 8268; 52 Cong. 1 sess.

[77] H. Report 1379; 52 Cong. 1 sess.: H. R. 8268; 52 Cong. 2 sess.: *Stat.* 27, 444.

[78] S. 612; 53 Cong. 1 sess.

[79] H. R. 7818; 53 Cong. 2 sess.: *Cong. Rec.*, Vol. 26, p. 8328.

[80] H. R. 8065, S. 2866; 56 Cong. 1 sess.

[81] *Cong. Rec.*, Mar. 19, 1900, 3036; Mar. 2, 1901, 3481.

[82] *Stat.* 31, 1436.

[83] H. R. 8143, H. R. 8144; 58 Cong. 2 sess.

[84] S. 2994; 58 Cong. 2 sess.

UNSUCCESSFUL EFFORTS TO CURTAIL FREE TIMBER PRIVILEGES

It seems strange that while extension of free timber acts was thus secured in every case without any opposition or comment, several bills were introduced into Congress to restrict the provisions of these very acts. In 1894, Representative McRae of Arkansas introduced a bill "To prevent the free use of timber on the public lands, and to revoke all permits heretofore granted."[87] This bill, amended so as to abolish only the provision allowing free timber for *manufacturing* purposes, was favorably reported by the House Committee on Public Lands,[88] and in spite of the opposition of Coffeen of Wyoming and Bell of Colorado, who saw in it great hardship for the millmen, passed the House.[89] It never came up in the Senate, however. For several years, McRae made persistent attempts to secure some modification of the free timber acts, but without success.[90] On March 2, 1900, Secretary Hitchcock sent a bill to the Speaker of the House and to the President of the Senate,[91] but it was not reported in either chamber. The next year, Jenkins of Wisconsin introduced a bill of similar nature, which likewise failed of a report.[92]

The question of free timber received no attention for nearly ten years after this, and when, at the request of President Taft in 1910, Senator Nelson brought in a bill to regulate timber disposal,[93] almost all of the timber of unreserved lands was gone, and the failure of this bill was not of very serious consequence. The two free timber acts, like the Timber and Stone Act, had outlived the forests which it was their function to destroy, and, like the Timber and Stone Act, they are both on the statute books today, reminders of a discreditable chapter in the congressional history of the public lands.

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[85] S. Report 1364; *Cong. Rec.*, Apr. 19, 1904, 5080.

[86] S. 268; 59 Cong. 1 sess.

[87] H. R. 7854; 53 Cong. 2 sess.

[88] H. Report 1400.

[89] *Cong. Rec.*, Dec. 5, 1894, 52-57.

[90] H. R. 40; 54 Cong. 1 sess.: H. R. 4090, H. R. 10878; 55 Cong. 2 sess.: H. R. 1032; 56 Cong. 1 sess.

[91] H. R. 10405, S. 3498; 56 Cong. 1 sess.

[92] H. R. 4371; 57 Cong. 1 sess.

[93] S. 5489; 61 Cong. 2 sess.

CONSERVATION ACTIVITY IN CONGRESS: INCREASING APPROPRIATIONS FOR TIMBER PROTECTION

Congress did not in all ways do as badly as in regard to the Timber and Stone and the free timber acts. During the same time that the provisions of these acts were being extended, some real advances were made in other directions. In the first place, appropriations for the prevention of timber depredations and fraudulent entries, although during several years considerably reduced, were ultimately greatly increased, as the following table clearly shows:

Year	Appropriation	Year	Appropriation[94]
1891	$ 120,000	1904	$ 250,000
1892	120,000	1905	250,000
1893	140,000	1906	250,000
1894	60,000	1907	250,000
1895	90,000	1908	500,000
1896	90,000	1909	1,000,000
1897	90,000	1910	750,000
1898	110,000	1911	650,000
1899	110,000	1912	500,000
1900	125,000	1913	500,000
1901	125,000	1914	475,000
1902	150,000	1915	475,000
1903	185,000	1916	475,000

Previous to 1896 or 1897, protection against timber depredations was always somewhat ineffectual. The committee of the National

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[94] Compiled from the Statutes at Large. These figures do not include deficiency appropriations, of which there were several during this time. The decrease of appropriations in 1893 was due, perhaps partly to Democratic economy, and partly to the crisis of that year, which greatly reduced the demand for land and timber and so permitted a reduction in the fund for protection. The increase in appropriations in later years was certainly due in considerable measure to the influence of Roosevelt, Hitchcock, and Pinchot.

Academy of Sciences estimated in 1897 that in the preceding decade over 11,000,000,000 feet of timber had been illegally taken from the public domain,[95] and the committee gave figures showing that during that time the government sued for over $26,000,000 and recovered something over $1,000,000—about 4 per cent of the amount sued for.

In the late nineties and thereafter, however, a considerable increase in efficiency is indicated. Thus, in 1895, a total of about $47,000 was recovered for timber trespasses,[96] while in the next year, over $182,000 was recovered. In 1909, with the appropriation of $1,000,000, 216 special agents were employed, and nearly $350,000 was recovered for various acts of fraud and trespass.[97] In 1911, 386 civil suits were instituted for frauds and trespass, largely on timber lands, and of these, 304 were won, while 124 criminal convictions were secured, and 47 prison sentences imposed.[98] It is not to be supposed that the greater number of cases reported, suits instituted, and the greater amount of money recovered, in later years, was due to a greater amount of fraud and trespass committed, for without doubt land frauds decreased pretty generally throughout the period under consideration. The larger appropriations were resulting in more efficient enforcement of the laws; and then, of course, Hitchcock, Pinchot, and Roosevelt injected a new spirit into public land administration.

OTHER HELPFUL LEGISLATION

Congress did more than merely appropriate money. In the first place, as pointed out in connection with the forest reserves, a law was passed in 1897 imposing a heavy penalty for setting out fires on the public domain.[99] This law was secured, it may be noted, in spite of the opposition of Congressman Bailey of Texas and Little of Arkansas, Bailey being opposed to the heavy penalty—a fine of not more than $5000, or imprisonment for not over two years—while Little opposed

[95] S. Doc. 105; 55 Cong. 1 sess., 33, 34. George F. Schwartz, of the United States Forest Service, estimated in 1909 that the government prosecutions then pending involved a total value of over $114,000,000. (*Report*, National Conservation Commission, II, 396-399.)

[96] S. Doc. 105; 55 Cong. 1 sess., 33, 34.

[97] *Report*, Land Office, 1912, 11.

[98] *Ibid.*

[99] *Stat.* 29, 594.

Federal jurisdiction in such matters.[100] The amendment of this law in 1900 has been discussed in the preceding chapter.[101] The laws of 1897 and 1900 applied to reserved and unreserved lands alike.

In 1906, a law was passed forbidding the boxing of trees on the public domain to get pitch, turpentine, etc.[102] This of course applied mainly to the southern states, where the lack of such a law had already resulted in the destruction of great forests of yellow pine. In yet another matter, Congress voted for conservation, by passing, in 1903, a law permitting registers and receivers to compel the attendance of needed witnesses.[103] Such a law had been needed by the department for nearly twenty years, and even when finally secured, it was somewhat defective in not permitting the registers also to require witnesses to produce papers, books, and documents;[104] yet it was of considerable value in the enforcement of the public land laws.

Several much needed laws have never yet been secured from Congress. The great timber frauds of 1903, 1904, and 1905 brought out prominently the need for a law specifically providing for the punishment of persons who fraudulently obtained, or attempted to obtain, title to public lands. Many of the indictments in the Oregon frauds were for *conspiracy to defraud the government;* and *conspiracy* was often difficult to prove, even where the facts clearly showed fraud. In 1905, Commissioner Richards sent to Congress a bill providing a heavy fine for any attempt to gain title fraudulently, with the urgent request that it be passed; but nothing was ever done with it,[105] and no such law has ever been passed.

Another item of legislation which has been much needed is an amendment of the law regarding perjury. Section 5392 of the Revised Statutes provided that every person falsely swearing under an oath administered, "in any case in which the laws of the United States authorize an oath to be administered," should be guilty of perjury. In the execution of the public land laws, it was often necessary that certain facts be established by oaths which were not specifically required by the *laws* of the United States, but were required by department *regulations* or *orders*, oaths essentially necessary in disposing of the public lands. It was repeatedly held that a charge of perjury could not be based upon an affidavit required only by departmental regulations,[106] and in 1905, the Commissioner of the Land Office urged upon Congress the amendment of this section, but such an amendment has not been made.

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[100] *Cong. Rec.*, June 10, 1896, 6395, 6396. An interesting forest fire measure was introduced about this time by Shafroth of Colorado, providing for the clearance of fire lanes 1000 feet wide at intervals of five or ten miles. This bill was favorably reported in the House, but Commissioner Hermann considered it impracticable, and it did not pass. (H. R. 9124, H. Report 1976; 54 Cong. 1 sess.: *Cong. Rec.*, Dec. 9, 1896, 53. See also H. R. 832, H. R. 9123; 54 Cong. 1 sess.)

[101] *Stat.* 31, 169.

[102] *Stat.* 34, 208.

[103] *Stat.* 32, 790.

[104] *Report*, Land Office, 1911, 43.

[105] H. Doc. 914; 59 Cong. 1 sess.

During the past thirty years or more, a great many efforts have been made in Congress to secure grants of land to various states for forestry purposes, but, as previously stated, these attempts were of little importance as indications of an interest in forest conservation. In 1904, 20,000 acres of land were granted to Minnesota, and two years later, a similar grant was made to Wisconsin. Since then there have been several efforts to secure grants for forestry purposes, but, except for the grant of some small islands to Wisconsin, no results have accrued from these efforts.[107]

RAILWAY LAND GRANTS ONCE MORE

The land grant forfeitures hitherto referred to were for failure to build the road. In 1907 and 1908, however, the land grant question came up from a new angle—the failure to comply with the conditions regarding the sale of granted lands—the chief offender in this respect being the Oregon & California Railroad Company, now owned by the Southern Pacific. In the grants to this road, a provision had been inserted, requiring the lands to be sold to settlers in tracts not exceeding 160 acres, at not more than $2.50 per acre.[108] Even as early as 1872, according to the Attorney-General, the Oregon & California

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[106] *Report*, Sec. of Int., 1905, 339.

[107] *Stat.* 33, 536; 34, 517; 37, 324: S. 1438, H. R. 7096; 61 Cong. 1 sess.: S. 6247, S. 7902; 61 Cong. 2 sess.: S. 5076; 62 Cong. 2 sess. A bill introduced by Senator Dixon of Montana passed the Senate in 1912, granting $7500 a year to state universities in the forest reserve states for the training of forest rangers. This bill, however, never came up in the House. (S. 5076; 62 Cong. 2 sess.)

[108] *Stat.* 14, 239; 15, 80; 16, 47, 94.

Railroad violated these provisions, in some instances selling land at prices largely in excess of $2.50 per acre, and in quantities exceeding 1000 acres to each purchaser; but the worst violations came after 1890, after the Southern Pacific system had secured control of these lands.[109] One of the first things the Southern Pacific did was to organize an effective land department, employing land examiners and timber cruisers to ascertain and appraise the value of each tract of land contained in the grant. About this time, some of the experienced timbermen of Michigan, Wisconsin, and Minnesota learned the value of the Oregon timber lands, and the railroad company was quick to see its opportunity to profit by selling to these timbermen in large tracts.

Late in the year 1902, the Southern Pacific adopted a new policy, and permanently withdrew all of its lands from sale. There then remained in its hands approximately 2,000,000 acres of the old Oregon & California grant, besides 300,000 acres claimed but not patented. After having disposed of approximately 800,000 acres, most of it in violation of the terms of the grants, the Southern Pacific resolved upon the plan of asserting a permanent estate in the remainder. Various excuses for this step were given. The San Francisco fire was used as an excuse for some time, the railway explaining that the records of the company had been destroyed, and with them its information concerning its holdings. In March, 1907, however, the attention of the United States Department of Justice was called to the state of affairs, and an investigation was made, which showed that a total of over 800,000 acres had been sold at an average price of about $5.50—nearly double the price provided in the granting act—and that, of this total of over 800,000 acres, only 127,418 acres had been sold according to the limitations provided by the act.[110] The Coos Bay Wagon Road grant,[111] now practically all held by the Southern Oregon Company, had been made subject to conditions similar to those imposed upon the Oregon & California, and similar violations were alleged to have occurred.[112]

Early in the year 1908, a Senate resolution introduced by Tillman of South Carolina was adopted, calling upon the President for information in regard to the alleged violations, and asking what action the Department of Justice had taken.[113] In accordance with this resolution, a representative of the Department of Justice was sent to Oregon to make a complete investigation of the subject, and a report was soon made to Congress, asserting the truth of the charges against the railroad.

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[109] S. Doc. 279; 60 Cong. 1 sess.

[110] *Ibid.*, 9.

[111] *Stat.* 15, 340.

[112] "Lumber Industry," I, 251.

At the same time that Tillman introduced the resolution calling for information, he also introduced a joint resolution directing the Attorney-General to enforce compliance with the conditions of the grant, and restore the lands to the public domain.[114] In the Senate, the latter resolution was opposed by Gallinger of New Hampshire, Teller of Colorado, and Foraker of Ohio, on the avowed grounds that congressional action was unnecessary to give the Department of Justice the right to forfeit,[115] but the resolution was adopted without any serious difficulty.[116] In the House, Fordney of Michigan was much concerned about the timbermen who had bought lands from the railroads, and he offered an amendment providing that the resolution should not apply to purchasers who had received patents.[117] The resolution itself threatened no injustice to innocent purchasers, and Fordney's amendment was merely an attempt to defeat the measure, for any amendment would probably have been fatal; but in spite of the efforts of Fordney and Denby of Michigan, Jenkins of Wisconsin, Smith of Iowa, and Keifer of Ohio, Fordney's amendment failed, and the resolution was adopted by a vote of 247 to 8. About forty-four representatives had been voting with Fordney on his amendment, but in the final vote on the original resolution all but eight of them ran for cover.[118]

The Tillman resolution directed the Attorney-General to institute suits, and determine the rights of the United States in regard to the

[113] S. Doc. 279; 60 Cong. 1 sess.: *Cong. Rec.*, Feb. 3, 1908, 1449.

[114] *Cong. Rec.*, Jan. 31, 1908, 1367.

[115] *Ibid.*, Feb. 18, 1908, 2111-2114.

[116] *Ibid.*, 2277.

[117] *Cong. Rec.*, Apr. 22, 1908, 5093. Fordney was interested in the lumber business in Washington, and this probably explains his attitude in this matter. (*Cong. Rec.*, Apr. 18, 1916, 6397.) For a reference to his work for a lumber tariff when the Payne-Aldrich tariff bill was before Congress, see "Lumber Industry," IV, 65.

[118] *Cong. Rec.*, Apr. 23, 5122-5139.

grants to the Central Pacific, the Coos Bay Wagon Road, and the Portland, Astoria & McMinville Railroad;[119] and four years later Congress passed another act, ratifying and confirming all claims of forfeiture which had been asserted by the Attorney-General.[120]

To the government suit for a general forfeiture of the unsold portions of the grant, the Southern Pacific entered a demurrer, but the Federal District Court of Oregon overruled the demurrer, sustaining the government in its contention that the grant was "on condition subsequent," and thus forfeitable if the condition were broken.[121] The railroad company of course appealed from this decision, and on June 21, 1915, the Supreme Court of the United States handed down a decision, reversing the decision of the lower court. The Supreme Court denied the government the decree of forfeiture asked for, on the ground that the condition imposed upon the railroad company regarding the disposal of lands to settlers was not a condition subsequent, as the lower court had held, but was a covenant, and that therefore the remedy for the breach of the condition was not forfeiture, but an injunction against further violations of the covenant. This seemed a somewhat inadequate remedy, but it did not prejudice any other suits, rights, or other remedies which the government might have by law or under the joint resolution of April 30, 1908, or under the act of August 20, 1912. The railroad company was enjoined, it may be noted, not only from selling in violation of the conditions imposed in the granting act, but from disposing of the lands in any way, until Congress should have a reasonable opportunity to provide for their disposition. Thus the entire matter was thrown back upon Congress.[122] In April, 1916, Congress took up the question of the disposition of these lands, and, after a few days of spirited debate, succeeded in passing a law which is a fitting climax to the long list of blunders dealing with the public forest lands.

THE ACT OF 1916

This law provides, in the first place, that the Secretary of the Interior, coöperating with the Secretary of Agriculture, shall classify the lands into power-site lands, timber lands, and agricultural lands; and provides different rules for the disposition of each class. Power-site lands are to be retained by the government. Timber lands are to be stripped of their timber, and then are to fall into class three as agricultural lands. The timber is to be sold by the Secretary of the Interior, in coöperation with the Secretary of Agriculture, under such plans and regulations as he may consider wise, as rapidly as "reasonable prices" can be secured in a "normal market." All lands other than power-site and timber are to be classed as agricultural, and these are to be disposed of under the law applying to land released from national forests, $2.50 being charged for the land, except for cleared timber lands, which are given free of all charge. No commutation is permitted.

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[119] *Stat.* 14, 239; 15, 80; 15, 340; 16, 47; 16, 94; 35, 571.

[120] *Stat.* 37, 320.

[121] 186 Fed. Rep., 861, 923.

[122] 35 Sup. Ct. Rep., 908, 926.

The main fund arising from the sale of timber and lands is to be disposed of as follows: first, the Southern Pacific is to receive an amount sufficient to bring its receipts up to the $2.50 per acre intended in the original granting act; second, 25 per cent of the remainder is to go to the state of Oregon for an irreducible school fund; third, another 25 per cent is to go to the various counties involved, for roads and highways; fourth, 40 per cent is to go to the reclamation fund, for the reclamation of arid lands; and, finally, 10 per cent drips into the United States treasury.

In several ways this statute was unwisely drawn. In the first place, it proceeds on the assumption that all of the lands involved are agricultural lands, or will become such as soon as the timber is removed, while all the evidence available indicates that many of the timber lands, perhaps most of them, are rough mountain sides that will never be fit for cultivation. There is no provision that looks to the reforestation of these natural forest lands. There is no recognition of the possibility that they may grow another crop of timber.

In the disposition of the fund arising, the provisions are unduly generous to the state of Oregon. Half of the fund goes direct to the state or to the counties in which the lands are situated, while 40 per cent more goes to the reclamation fund, and on this fund Oregon will probably have some priority of claim. Only 10 per cent is to go to the United States treasury, although $100,000 had to be appropriated immediately for the expenses of classifying the lands. In its generosity to the state of Oregon, this act contrasts with the general law relating to public land sales, which gives only 5 per cent to the states in which the lands are situated. It was explained by the Oregon delegation in Congress that this was only justice, since the Southern Pacific, by refusing to sell to "settlers," had greatly "interfered with the development of the state"; and the Federal government had been party to the wrong by failing to assert its right to forfeit the grant. It is unnecessary to dwell much upon the logic of this position, but a government investigator, reporting on these lands, stated that for a long time the railroad company was unable to get $2.50 per acre for what were then almost valueless timber lands, and that, since they were mainly forest lands, they could never have been taken up by settlers anyhow. Several men in Congress, even several from the West, as well as the House committee reporting the bill, complained that the act was too generous to the state of Oregon; and former Speaker Joe Cannon offered an amendment cutting off the 40 per cent to the reclamation fund and turning it into the United States treasury, but this amendment was lost. Representative Sinnot of Oregon complained that his state was not even getting enough out of the deal. It seems to have been necessary to treat Oregon very generously in order to get the bill through Congress promptly. The court decision had given Congress six months to provide for the disposition of the lands, and it was necessary to legislate without delay.

The question naturally emerges, Why were not these lands placed in a forest reserve? That would have been the logical procedure, and it doubtless was the policy favored by most of the government officials; but it seems that the Oregon delegation in Congress was strongly opposed to any such disposition of the lands, and probably they represented the attitude of the people of the state. The Oregon State Land Grant Conference, which met at Salem in September, 1915, expressed "unalterable opposition" to any further increase of forest reserves in Oregon. A government investigator who was sent out to look over the lands asserted that this conference was not representative of the people as a whole; but the Oregon senators and representatives, who may be assumed to have sounded out public opinion, seem to have been generally hostile to the inclusion of more lands in reserves. It was suggested by Representative Johnson of Washington that the lands would ultimately be included in reserves anyhow, and this seems a reasonable guess. Lands which have been cleared and found unfit for agriculture will need to be reforested, and the state of Oregon will probably be willing that this should be done at Federal expense, through inclusion in a national forest reserve.

The value of timber involved here has probably been exaggerated in many discussions of the matter. Government officials have estimated that there is a total of some 70,000,000,000 feet of timber here; but it is doubtful if anything like $50,000,000, or perhaps even $30,000,000, will ever be realized from the sale of the timber or of the lands. Certainly it will be a long time before any such sum can be realized, for there are vast resources of timber to the north in Washington, and to the south in California, which are more accessible to the market than much of this timber.[123]

THE NORTHERN PACIFIC LANDS

The facts in regard to the Northern Pacific grant were somewhat different from those regarding the Southern Pacific, being complicated with the various mortgages on that road. The act of 1870, authorizing the Northern Pacific to issue mortgage bonds, had provided that all lands not sold or subject to the mortgage, at the expiration of five years after the completion of the entire road, should be disposed of to settlers at not over $2.50 per acre; but it also provided that in case of foreclosure, mortgaged lands might be sold at public auction, in tracts not larger than a section.[124] At the foreclosure of 1875, the lands, being mostly unpatented, were not sold. At the foreclosure of all later mortgages in 1896, all patented lands were sold at public auction; but the new railway was reported in every instance the highest bidder,[125] and in 1910, the Northern Pacific still held nearly 10,000,000 acres of land, over 3,000,000 of which was timbered. It had sold vast tracts to the Weyerhaeuser Timber Company, 900,000 acres being thus disposed of in one block in 1900 at $6 per acre.[126]

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[123] H. R. 14864; 64 Cong. 1 sess.: *Stat.* 39, 218 et seq.

[124] *Stat.* 16, 379.

[125] "Lumber Industry," I, 235.

[126] *Ibid.*, 236, 237.

As a result of the government suit against the Oregon & California, a large number of persons settled on the railroad lands involved, and also on the Northern Pacific lands in southwestern Washington, evidently with the idea that the act of 1870[127] gave them the privilege of buying at $2.50 per acre. The case of one of these settlers was brought before the Land Office, and there the decision was against the claimant,[128] on the ground that the real issue as to the effect of the conditions in the law of 1870, regarding sale to settlers, was a question for the courts. It is of course established by a long line of decisions that Congress alone, rather than individual settlers, would have the right to challenge the railroad company for non-performance of the condition.

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[127] *Stat.* 16, 379.

[128] "Land Decisions," 38, 77.

CHAPTER VIII

HOSTILITY TO THE NATIONAL FORESTS IN RECENT YEARS: OPPOSITION TO THE GENERAL POLICY OF RESERVATION

Hostility toward the national forests, in recent years, has arisen from somewhat the same causes that were operative in earlier times; yet it will be appropriate at this point to note briefly the various grounds of opposition. These grounds of hostility may be classified into: first, those which rest on the assumption that the policy of reservation is fundamentally wrong in principle; and second, those which pertain not so much to the general policy of reservation as to the manner in which the Forest Service has carried out that policy.[1]

OPPOSITION TO THE GENERAL POLICY OF RESERVATION: INTERFERENCE WITH THE DEVELOPMENT OF THE WEST

The general policy of reservation has been opposed for various reasons, but probably no reason has been advanced more frequently than that this policy "interferes with the development of the West." This line of reasoning, as old as the forest reserves, is still heard frequently in Congress. Some western senators have been wont to enlarge upon the "civilization" the western people have built up—a civilization which would of course have been impossible "if Mr. Pinchot's system of managing the forests had existed." Representative Johnson of Washington once complained that the people of his state were "literally being conserved out of existence." There has been a general argument that the "farmer, the home builder, the tiller of the soil," rather than the "coyote and the panther and the bear," are the real "foundation of our growth and development." As a western writer in the *North American Review* (191, 474) once expressed it:

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[1] For a good statement of the reasons for opposition to the reserves, see memorials of western states presented in Congress. *Cong. Rec.*, Dec. 5, 1907, 167; Apr. 28, 1909, 1567; May 14, 1909, 2019.

"The forest reserve system hampers all forms of industrial development. We have an area larger than many a European kingdom put to its lowest instead of its highest economic use. We have a policy which is an absolute reversal of more than one hundred years of national habit and tradition; a policy which holds barrenness a blessing, and settlement a sin; which fines, instead of encouraging, the man who would develop a natural resource."

In the anti-conservation attack of 1912, there was much complaint about the emigration of settlers to Canada, which was claimed to be due to the greater liberality of the Canadian settlement laws. Senator Borah was particularly anxious that something be done to make the laws of the United States so liberal that settlers would no longer have to go to Canada to secure homes. Senator Smoot of Utah very properly pointed out, however, that in many respects the Canadian land laws are less generous than those of the United States.[2]

Without a doubt, many of the complaints about the interference with the development of the West were made in all earnestness and good faith; but in general they were based upon a narrow view of the interests of the country as a whole, often on a short-sighted view of the development of the West itself.

INCLUSION OF AGRICULTURAL LANDS

In no way has the reservation policy "interfered as much with the development of the West," perhaps, as by the inclusion of agricultural lands within the forest reserves. This has of course been a cause of western hostility since the very beginning of the reservation policy. Representative Taylor of Colorado once asserted that the opposition of the West was directed largely at the "conservation of sage brush, cactus, and buffalo grass."[3]

As indicated in a previous chapter, an act was passed in 1906 providing that the Secretary of Agriculture might examine and segregate any lands within forest reserves which were *chiefly valuable for agriculture and might be so used without injury to the forest reserves.* Since this law left the opening of lands to the discretion of the Secretary of Agriculture, however, it was always far from satisfactory to many people in the West, who thought the reserves should be open to anyone wishing to try to make a home there—who thought the decision as to what was agricultural lands should rest, not with the Secretary of Agriculture, but with the entryman himself. As Senator Heyburn once stated it: "It is not within the power of the bureau to determine whether a man can make a farm out of a particular piece of land. If the land is agricultural land, the only man who can determine that is the man who is willing to go there and devote his energies to making it a home and expend his effort in an attempt to do so." Representative Rucker of Colorado expressed the idea in similar language: "The man who wants a home, who perhaps has spent the most of his days upon the farm, acquainted with soils, a long resident of the West, knowing the adaptability at different altitudes for a given kind of a crop, and willing to take his chances, is met with a denial of his right by some youngster just from the city, or college life, and is curtly informed the land is not suitable for agricultural pursuits."[4]

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[2] *Cong. Rec.*, Feb. 26, 1909, 3222, 3223, 3226; Feb. 1, 1910, 1353; May 19, 1910, 6521; May 14, 1912, 6397; Mar. 10, 1914, 4637; 63 Cong. 1 sess., Appendix, 465: *No. Am. Rev.*, Apr., 1910: *Independent*, 68, 697.

[3] *Cong. Rec.*, Feb. 1, 1910, 1352.

EFFORTS TO ELIMINATE AGRICULTURAL LANDS: THE NELSON AMENDMENT

Within the past decade, repeated efforts have been made to secure some modification in the law of 1906. The appropriations of 1912 were held up several weeks by a disagreement between the two houses, largely on the question of agricultural lands in the national forests. No sooner had the appropriation bill been brought up in the House than Representative Hawley of Oregon launched a determined attack on the Forest Service, for inflicting so many hardships on the "settlers" whose "almost incredible heroism, toil, and suffering" had brought civilization into the West. Martin of South Dakota suspected that the Forest Service often appropriated the residences of homesteaders for ranger stations, and offered an amendment to prevent that. Three of the Colorado delegation, with Dies of Texas, Booher of Missouri, and Fitzgerald of New York, expressed their disapproval of the reserves on various grounds, while Mondell veered around to a very fair and reasonable attitude, although still somewhat hostile. After considerable debate the appropriation bill got past the House without serious mutilation, but in the Senate a more decided hostility was immediately manifest. Senator Heyburn promptly assumed his familiar rôle, supported of course by his colleague Borah, and by other western men, and also by men from farther east—Cummins of Iowa and Gallinger of New Hampshire. One of the chief objects of criticism in these debates was the inclusion within national forests of agricultural and other non-timbered lands.

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[4] *Cong. Rec.*, Feb. 10, 1911, 2291.

After several days of debate, Senator Nelson of Minnesota arose with an amendment *directing* and *requiring* the Secretary of Agriculture to select, classify, and segregate as soon as practicable, all lands within the boundaries of natural forests that were *fit for agricultural purposes*, and opening such lands to settlement under the homestead laws.

Senator Nelson's amendment aimed a very severe blow at the forest reserves. In the first place, it *directed* and *required* the Secretary of Agriculture to segregate the lands, thus leaving him no discretion in the matter. In the second place, it provided for the elimination of all lands *suitable and fit for agricultural purposes*. The Forest Homestead Act of 1906 had provided for the elimination of lands *chiefly* valuable for agriculture which *might be so used without injury to the forest reserve*, and which were *not needed for public purposes*. Nelson's amendment provided for the opening of agricultural lands irrespective of their value for other purposes, or of the need for them for public use. Thus heavily timbered lands of only a slight value for agriculture would have been opened up to exploitation under this amendment, even though the value of the timber might have been ten times greater than the agricultural value of the soil when cleared. Such a provision as that would inevitably have resulted in gross frauds. Entrymen would merely have taken up claims and sold them to large timber owners, and the "poor settlers" would have built no "homes" after all. Also it should be noted that all ranger stations or other plots necessary to the efficient management of the forests would have been opened up under this provision, if they possessed even a slight value for agriculture.

Thus the Nelson amendment was calculated to do immense injury to the national forests, perhaps to overthrow the entire reservation policy, and the American Forestry Association sent a vigorous petition against it; but it was accepted in the Senate with little opposition. The House, however, refused to accede to it, and the bill went to a conference committee, which, in its report, left out the worst features of the amendment. The Senate, by a vote of 36 to 27, refused to accept the conference report, as did the House also, and the bill went back to the conference committee a second time, but the second report again refused to accede to the Senate amendment; in fact, it was further from the Senate view than the first report had been, but after some debate the Senate finally adopted the report. The House conferees received felicitations for "outgeneraling" the Senate members of the committee. The amendment, as finally passed, *directed* and *required* the Secretary of Agriculture to segregate all lands that "might be opened to settlement and entry under the homestead laws applicable to the national forests." "Homestead laws applicable to the national forests" meant, of course, the Forest Homestead Law of 1906, so that there was really no change in the law, except that the duty of the Secretary of Agriculture to open up lands was now mandatory. The sum of $25,000 was appropriated to cover the expense of opening these lands, and each year since 1912, $100,000 has been provided for this purpose.

Thus the national forests successfully weathered the storm of 1912. There have been other attacks since, but it seems likely that this complaint regarding agricultural lands will gradually disappear. As a result of the appropriations mentioned above, a total of about 15,000,000 acres has been eliminated—by no means all strictly agricultural lands. Nearly 6,000,000 acres have been eliminated from the Chugach National Forest alone.

JUSTICE OF THE COMPLAINTS REGARDING THE INCLUSION OF AGRICULTURAL LANDS

The fact that some agricultural lands have been eliminated from the national forests indicates that there was some basis for complaint. It is certain, however, that the great majority of "settlers" who told such pitiful tales of hardships endured in trying to build their homes in the forests, were not bona fide settlers at all, but merely entrymen who were trying to get possession of timber, mineral deposits, power sites, or other natural resources, with no intention of building homes.

Careful investigation of 116 perfected homestead claims in Idaho and eastern Washington disclosed the fact that, of the timbered claims, about one half of 1 per cent were later reduced to cultivation. Another investigation of 160 claims in Idaho revealed 100 claims with no lands susceptible of cultivation, 40 or 50 claims with about five acres each which might be cultivated after the timber was removed, 20 claims with an average of 10 acres, and only 10 claims with an average of 40 to 80 acres of cultivable lands. A careful study of 95 timbered homesteads in the Kaniksu National Forest showed that only 1.84 per cent of the cultivable land had been put to agricultural use. A similar examination of 71 claims in the Clearwater National Forest of Idaho showed that only slightly over 1 per cent of the claims had been cultivated. Of a total of 12,330 acres in certain contested claims in the Northwest, only 47 acres were found to be under cultivation—less than four tenths of 1 per cent.[5]

Almost all of the heavily timbered land, of course, found its way into the hands of lumber companies. Figures were obtained on nine townships in Idaho adjacent to the St. Joe National Forest, and it was found that, of 264 homesteads patented, 208 passed to lumber companies within three years after patent was issued, and nearly all the rest were being held for speculation. In another township in the same state, investigation of 100 patented homesteads revealed the fact that, although in many cases patent had only recently been issued, 70 of the homesteads had passed to lumber companies.

At the earnest solicitation of some of the Washington delegation in Congress, over 400,000 acres of land were eliminated from the Olympic National Forest in Washington, on the ground that it was agricultural land. The land thus eliminated for *agricultural* use was largely taken up under the Timber and Stone Act, which required oath that the land is "*valuable chiefly for timber but not fit for agriculture*"; and ten years later the total area in cultivation was only 570 acres.[6] Many other examples might be given to show that very many of the efforts to secure the elimination of alleged agricultural lands were not made in good faith at all, but were really attempts to secure valuable timber, minerals, or other resources.

[5] *Report*, Forester, 1914, 2, 3, 4.

[6] "Lumber Industry," I, 267: *Cong. Rec.*, June 17, 1913, 2061.

Some of the appeals made in Congress in behalf of the "settlers" were so maudlin as to be even highly ridiculous. Representative Johnson of Washington once read a letter in the House purporting to be from one of these settlers: "Brother Johnson, while we are slowly starving to death the work of conservation goes on. We have no Christmas, we have no New Years, and are getting old before our time because of no money and no way of getting employment to earn money. We have no hope. We have nothing to look forward to but the visit of the forest ranger."[7]

Although the charge has been made repeatedly that the Forest Service has been hostile to settlers within the national forests, and has tried to put unnecessary impediments in the way of settlement, it seems doubtful if this has often been true. A Federal bureau would naturally be slow in its action upon claims and would perhaps require considerable "red tape" in applications. A few of the officials have been arbitrary, some have been ignorant of local conditions and needs, but there is no reason why the Forest Service should be generally hostile to settlers in the reserves. Settlers on or near a national forest, under a proper administrative policy, help both its protection and development. The greatest single task of the government is to prevent forest fires, and the force organized for this purpose is recruited largely from those living in or near the forest. Settlers are also a help in locating fires, and by means of telephone connections are able to report quickly to the forest officers.[8]

THE QUESTION OF RANGER STATIONS

The charge has often been made that the Forest Service uses considerable areas of valuable agricultural lands for ranger stations. Senator Heyburn was particularly bitter about this, and on sundry occasions voiced his sentiments in no uncertain terms. Representative

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[7] *Cong. Rec.*, Mar. 10, 1914, 4637.

[8] On agricultural lands in the forest reserves, see H. R. 18960; 62 Cong. 2 sess.: *Stat.* 34, 233; 37, 287, 842; 38, 429, 1099; 39, 460: *Am. Forestry,* Aug., 1912, 527, 536; Sept., 1912, 585: *Report,* Sec. of Agr., 1909, 377; 1911, 352; 1912, 481; 1916, 160: *Report,* Forester, 1914, 2, 3, 4: *Report,* Land Office, 1906, 43; 1907, 21: *Agr. Yearbook,* 1914, 70 et seq. See also H. R. 14053; 58 Cong. 2 sess.: S. 519; 60 Cong. 1 sess.: H. J. Res. 54; 62 Cong. 1 sess.: S. 7203; 62 Cong. 2 sess. For opposition to the national forests in Arkansas, see H. R. 18889, H. R. 20683, H. R. 20684, H. Res. 314, H. Res. 332, H. Res. 491; 61 Cong. 2 sess.: H. R. 6149; 63 Cong. 1 sess.: 64 Cong. 1 sess., Appendix, pp. 893 et seq.: S. Doc. 783; 62 Cong. 2 sess.

Martin of Colorado likewise regarded this as one of the worst abuses of the reservation policy, and in the debates on the Agricultural Appropriation Bill of 1911, as a slap at the Forest Service, he offered an amendment reducing the cost of rangers' cabins from $650 to $500—a figure which Mondell thought was still 50 per cent too high. This was a favorite method of attack upon the reserves, and almost every year some effort was made to cut down the cost of rangers' cabins, or to impose some restriction on their construction or use. In 1912, Representative Martin of South Dakota secured an amendment forbidding the Forest Service to use the residences of homesteaders for ranger stations.[9]

The Forest Service has denied that there is any real justification for complaints regarding the appropriation of administrative sites. In response to a Senate resolution in 1913, demanding information on this point, Secretary of Agriculture James Wilson made a report showing that in the state of Washington, with about 10,000,000 acres of national forests, 424 administrative sites had been withdrawn, with a total area of about 40,000 acres, and of this total only 272 acres were under cultivation. Over 80 per cent of the area of these administrative sites was reported to be under heavy timber or permanently unsuited to agriculture by climate or soil.[10] It is of course sometimes necessary for the Forest Service to use sites for administrative purposes which are not absolutely worthless for agriculture. Successful protection of the forests requires not only an adequate force, but a well-placed force of rangers. Furthermore, since ranger stations must be placed where forest officers can either actually live with their families throughout the greater part of the year, or make headquarters during the summer months with sufficient feed for their saddle and pack horses, it is necessary to select for this class of sites areas which furnish a fair pasture. The Forest Service must obviously provide for its own needs; but it does not displace settlers already in possession, or reject applications for the listing of land in order to take the land for public purposes.[11]

[9] *Cong. Rec.*, Mar. 8, 1910, 2891; Feb. 4, 1911, 1957, 1958; Mar. 7, 1912, 2982; *Stat.* 37, 280.

[10] S. Doc. 1075; 62 Cong. 3 sess.

[11] *Report*, Sec. of Agr., 1912, 467.

GRAZING IN THE NATIONAL FORESTS

The grazing lands included in the national forests have continued to claim considerable attention, just as in the earlier period, although it is probable that the hostility arising from this cause has decreased considerably in recent years. Some of the western men have always insisted that the Forest Service has no right to make any charge at all for grazing. As Representative Taylor of Colorado once (1910) expressed it: "It has been one of the important rights and privileges of the settlers of every state in this Union for a hundred years to use, free of charge, the public domain for the grazing of their stock, and why should not our cattle be allowed to eat government grass which would otherwise go to waste? It did not cost Uncle Sam a dollar, and why should the government, now for the first time in a century, inflict a tax upon the people of the West for the grazing of that grass?"[12] Mondell, in similar vein, pointed out that the charge for grazing had never been specifically authorized by Congress.

To those who denied the right of the government to exact any charge at all for grazing, even a very small charge would seem too high; and there has been much complaint that the fees are too high; but as a matter of fact they have been only about one third as high as the fees charged by private owners in the same districts. Within the past few years, there has been some complaint in Congress because this charge was so low, and the Forest Service made plans for a "revision upward," but later abandoned them because of the war. In time, the grazing fees should be raised, because, at their present figure, the demand for grazing privileges on most of the forests far exceeds the carrying capacity, and the granting of privileges necessarily involves discrimination in favor of certain applicants.

The Forest Service has sometimes been accused of discriminating in favor of large owners. Mondell claimed in 1910 that it was the rich and powerful men in the National Live Stock Association who were most friendly to the Forest Service; that they were given permits while small men were denied; and that big sheepmen often got control of large areas by having each sheep herder file application for a permit. Representative Rucker of Colorado has expressed similar views.[13]

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[12] *Cong. Rec.*, Feb. 1, 1910, 1352.

[13] *Cong. Rec.*, Feb. 1, 1910, 1338, 1339; Feb. 10, 1911, 2291.

Mondell claimed that thorough grazing of the forest reserves was the best of all safeguards against the spread of forest fires, and that the Forest Service, by interfering with grazing, had actually in some cases increased the fire hazard. His theory was that under the management of the forest reserves previous to 1910, the grasses grew year after year, died, and finally formed a mat through which fire, under a wind, ran with great rapidity.[14]

Doubtless there has been occasional justification for the criticism of the management of grazing lands, but in general the control of such lands by the Forest Service has resulted in a great improvement in range conditions. Previously, overstocking had caused the destruction of some ranges, and in many regions a decrease in carrying capacity. Perhaps the greatest evil was the "transient" or "tramp" herds of sheep, usually bands of sheep being driven from distant ranges to points of shipment, or being driven between summer and winter ranges, which were often long distances apart and sometimes located in different states. These bands just drifted around in search of good feeding grounds and camped wherever such areas were found, often grazing the land far too close. This and other evils the Forest Service has now under fair control. The criticism that the Forest Service has favored the large cattlemen and sheepmen has certainly not been valid. The policy of the service has been to favor the smaller owners. It was once explained in Congress that, in disagreements between the stockmen and the Forest Service, the wealthier stockmen could hire adequate counsel to look after their business, and were less likely to cherish any grievance; but the Forest Service has tried to promote the organization of local livestock associations, and through these associations the smaller owners are able to secure somewhat the same service as the larger owners. These associations assist, not only in the settlement of disputes, but in the salting of stock, in the improvement of breeds of cattle, and in many other ways. One of the great advantages arising from government control of ranges has been the prevention of the range "wars"—the quarrels among grazers, particularly the deadly feuds that were waged between the sheepmen and the cattlemen.[15]

As to what is really the attitude of the majority of the stockmen toward government regulation, the evidence is somewhat conflicting. The Public Lands Commission of 1903 sent out 1400 inquiries to stockmen, asking their views on this, and 1090 of the replies received were favorable to government control, while only 183 were opposed. In the opinion of the writer, however, this does not represent accurately the attitude of the stockmen toward such control as the Forest Service has exercised—a control that involves the exaction of a fee for grazing. The complaints of various western men in Congress, and other evidence as well, indicate that many of the stockmen are still opposed; and probably when the grazing fees are raised to something approximating a commercial level, this opposition will become even stronger.[16] Some stockmen, it is true, feel that the inclusion of grazing lands within the national forests is an advantage to grazers, because it protects them against the encroachments of settlers. This rests upon the assumption that the national forests are closed to settlement, an assumption that is valid at least as far as fraudulent settlement is concerned. Some of the reserves being closed to sheep, it is natural that many cattlemen in those districts should look favorably upon the system which protects them from their bitterest enemies. It has been claimed that practically all of the cattlemen in some sections are strongly favorable to the reserves.

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[14] *Cong. Rec.*, Feb. 2, 1911, 1855.

[15] *Forest Bul.* 62, 1905, p. 17.

MINING IN THE NATIONAL FORESTS

Complaints that the national forests interfere with mining development have not been as common as in an earlier period, yet they are still heard occasionally. The contention is that it is difficult to say, in the early stages of a mining claim, whether it is going to be a success or a failure, and that no mining prospector cares to search for minerals, knowing that his work and his judgment have to be submitted to some forester to determine their validity. It has been claimed that prospectors have tended to leave the forest reserves, because of the exactions of the Forest Service.

It is doubtful whether the Forest Service has discouraged legitimate mining industry. The discouragement has generally been placed in the way of a wrong use of the mining laws, and extravagant use of the timber resources; and that is the reason for many of the complaints. Senator Smoot of Utah called attention in 1909 to numerous attempts that had been made to gain title to timber lands in the West through the mining laws; and Senator Flint of California asserted that several million dollars worth of timber in his state would have been taken up in this way, had it not been for the vigilance of the Forest Service. In 1908, the Commissioner of the Land Office decided adversely on a number of placer mining locations in the Plumas National Forest, made by H. H. Yard and the North California Mining Company. These locations covered timber worth several million dollars. In one instance a large livestock company, in order to establish a complete monopoly of the surrounding range, proceeded to put mining locations and mill sites upon all the watering places, with the exception of two or three which were covered by scrip location. No mineral development was attempted on any of these claims. The locations were upon formations containing no mineral showing whatever, and the alleged development work consisted of tunneling and trenching for the diversion of water, and in the building of corrals, tanks, and pipe lines for the handling and watering of the cattle. In this way, waterholes were secured which gave control of approximately 500,000 acres of valuable range. In another instance, a certain sheep owner located a mining claim covering a spring and some abandoned placer diggings, and applied for a patent, claiming as his $500 worth of development the work done by those who had abandoned the claim, and work done by some Chinamen who had occasionally worked the claim when they couldn't find anything else to do. The sheep owner was trying in this way to get control of the only water supply for a considerable area.

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[16] *Forest Bul. 62*, p. 24.

In still another instance, certain individuals made application for the patenting of some placer locations, alleging the existence of valuable minerals. Investigation showed no mineral at all except a sort of shale, which the locators alleged had some value for cement making. In the application, the locators alleged $1500 worth of work, and investigation showed that all the work that had been performed was in grading for driveways and for building locations, and that it actually amounted to less than $300. It appeared also that the locators had incorporated a company for the exploitation and sale of building sites for summer homes, this location being in the mountains, directly on an electric car line leading from a city of considerable size. Along the Grand Cañon there are many mining claims, locations made years ago, ostensibly for mineral, but in reality covering portions of the cañon rim and trails in such a way as to give the claimants the right to exact a charge upon the traveling public.[17] Attempts on the part of power companies to procure title to power sites by locating mining claims have been fairly numerous.

Thus abuses of the mining laws have been much the same in recent years as in earlier periods, except that, with the increasing vigilance of the government, such abuses are undoubtedly much less frequent than formerly. Most locations are made in good faith; in fact, certain officials have estimated that four fifths of the locations are bona fide.

The man who engages in mining as a legitimate, permanent industry has no serious grounds for complaint against the national forests or the Forest Service. He is not limited as to the time within which he must apply for patent, but is at liberty to develop the ground and extract the mineral to any extent, subject only to the mining laws of the state. The miner has no trouble in applying for patent under the mining laws if the ground is chiefly valuable for minerals. The one who has trouble is the man who tries to secure, under cover of the mining laws, a town site, a summer resort, valuable timber land, a water power site, watering places in the desert, or mineral springs in the mountains; or the man who tries to capitalize a worthless hole in the ground, and sell mining stock to the gullible public.

There is one way in which the Forest Service has perhaps retarded the development of mining in the reserves, and that is by restricting the use of timber for mining purposes. In an earlier period, miners took vast quantities of timber absolutely free of cost, and under such circumstances could of course develop their mines very cheaply and rapidly. However, as Pinchot has pointed out, the Forest Service, by its conservation policy, provides the only practicable future supply of timber for mining, and so provides best for its long-time development.[18]

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[17] *Am. Forestry,* Apr., 1917, 225 et seq.: *Report,* Forester, 1914, 3.

[18] See *Cong. Rec.,* Feb. 26, 1909, 3040; Mar. 8, 1910, 2893; Mar. 1, 1911, 3772; Mar. 12, 1914, 4752, 4753: *Forest Bul.* 67, 13: *Report,* Sec. of Agr., 1908, 415; 1912, 475: *Report,* Forester, 1914, 3.

WATER POWER DEVELOPMENT IN THE NATIONAL FORESTS

Agricultural, grazing, and mineral lands are not the only natural resources that the national forests have been accused of "bottling up." There has recently been a great deal of complaint that the national forests included many valuable water power sites and that the policy of the Forest Service was so exacting as to prevent adequate development of these resources. It is estimated that there is within the national forests approximately 12,000,000 horse power which can be developed from natural streamflow, and that this amount can be increased very greatly by the construction of storage reservoirs.

The act of 1891, providing for the creation of forest reserves, made no provision for the development of power. One of the sections of that act, however, provided that rights of way across the reserves might be granted for irrigation purposes; and seven years later, this was expanded to include the development of power, providing it was "subsidiary to the main purpose of irrigation." In 1901, this proviso was removed, and the Secretary of the Interior was authorized to permit the use of rights of way through the public lands and reserves for electric plants. Under this act, the permit must be approved by the chief officer of the department concerned, and might be revoked by the Secretary of the Interior at his discretion. This is still the law on the subject, although a section was added in 1911, authorizing the issue of permits for rights of way, for not to exceed fifty years. The issue of such permits is, however, still at the discretion of the Secretary having jurisdiction over the land.[19]

Under the regulations adopted by the Forest Service in 1910, a certain charge was exacted of those who used power sites, and this has of course aroused some opposition. Representative Martin of Colorado spoke of the "dog-in-the-manger" policy of the government in charging this rental. "The proposition of the government is this," he said, in discussing the agricultural appropriation bill of 1912: " 'It is true we do not own the water in the stream, but we happen to own the land bordering the stream, land that is probably not worth farming. We happen to own the only desirable and available place along this stream anywhere to build a dam and reservoir and create power. Now, we will not let you buy this land. There is no price on it. You can not condemn or buy it. We will lease it to you for a period of years, and will not simply charge you a rental for the land, but we will impose a charge that will be equivalent to a tax upon the value of your plant and the proceeds of your entire business.' "[20] In somewhat similar vein, Representative Taylor of Colorado complained of the effort of the government to get water power companies to pay royalties into the Federal treasury, pointing out that the East was not paying any royalty for the use of its water.[21]

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[19] *Stat.* 26, 1101; 28, 635; 29, 120; 30, 404; 31, 790; 33, 628; 34, 163; 36, 847, 1253. See also *Opinions*, Atty.-Gen., 25, 470; 26, 491; and *Proceedings*, Society of Am. Foresters, Apr., 1913, 5 et seq.

There has been much dissatisfaction also with that provision of the law which authorizes the revocation of permits at the discretion of the government. It is urged that on account of this clause, it is very difficult to obtain capital for development. Water power development is said to have cost many capitalists their fortunes, even when the terms were most liberal, and the restrictive policy of the government is claimed to have made the field even more uncertain.

There is a large element of justice in the complaints of western men regarding the water power situation. It is easy to see how they would resent the payment of rentals to the government. As far as conservation is concerned, it appears that the speedy development of water power resources would be an excellent means of conserving other resources, furnishing electric power for railways and for other purposes, and thus saving the coal and oil and wood which are now used as fuel. This would greatly decrease the number of forest fires also, since a large proportion of such fires are started by locomotives, and so would conserve the supply of timber. It might easily seem that the government should encourage the development of water power in every way possible, instead of imposing a tax upon it.

In answer to this, however, Forest Service officials argue that it is not unreasonable to impose some charge for the use of a valuable natural resource, and point out that by requiring the payment of this charge, and by requiring development to be made within a reasonable time, they have been able to keep better control of the water power situation, and keep out speculators who otherwise would have appropriated sites, perhaps held them out of use, merely with the intention of selling at an advance to someone who really wished to develop. The Forest Service claims that its policy results in some cases in more rapid development than would otherwise occur, by preventing speculators from getting control and holding sites out of use.

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[20] *Cong. Rec.*, Mar. 7, 1912, 2991.
[21] *Cong. Rec.*, Mar. 2, 1911, 4016.

The provision giving the Secretary of Agriculture power to revoke water power permits is clearly one that is open to criticism. It is true that permits for projects of more than 100 horse power total capacity are usually for fifty years, but they may specify a shorter time or may be indeterminate, and permits for projects of 100 horse power or less are always issued for indeterminate periods, subject to revocation by the Secretary of Agriculture. Also, in order that the interests of consumers of power may be protected, permittees are required to abide by reasonable regulation of rates and of service by the state, or, if the state does not exercise such regulation, by the Secretary of Agriculture.

It is easy to suppose that under such restrictions as these, the water power resources in national forests would not present a very attractive field for the investment of capital; and yet the Forest Service claims that water power development has proceeded much faster in the West than in the East, that the development per capita of the western states in 1912 was two and one half times as great as in other parts of the country, that there is even a "considerable overdevelopment in nearly all the power centers of the western states, California, Oregon, and Washington in particular showing installations far in excess of maximum demands."

The water power question is still unsettled, and it is not the purpose of this book to point out any solution. The present situation is certainly not satisfactory in all respects. On the other hand, it must be noted that the present situation is vastly better than it would be if the Forest Service had not guarded the power sites very carefully, for the government can still turn these over to private exploitation at any time it sees fit, while it would have very serious difficulty regaining control if it had once given up its title. It is not so important that the matter should be settled *immediately* as it is that it should be settled *wisely*, for it involves the interests of future generations.[22]

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[22] *Report*, Sec. of Agr., 1916, 173 et seq.; 1912, 597: Forest Service, Use Book,

One thing is certain, at any rate, and that is that if it had not been for the aggressive and persistent efforts of Pinchot, many of the water power resources of the country would now be under control of a few powerful interests, and might present a far more difficult problem than they do. Pinchot's interest extended not only to water power in the national forests, but also to water power development on navigable streams elsewhere. He had a vision of the future importance of electricity in the West. "Let us suppose a man in a western town," he wrote in 1908, "in a region without coal, rising on a cold morning, a few years hence, when invention and enterprise have brought to pass the things which we can already foresee as coming in the application of electricity. He turns on the electric light made from water power; his breakfast is cooked on an electric stove heated by the power of the streams; his morning newspaper is printed on a press moved by the electricity from the streams; he goes to his office in a trolley car moved by electricity from the same source. The desk upon which he writes his letters, the merchandise which he sells, the crops which he raises, will have been brought to him or will be taken to market from him in a freight car moved by electricity. His wife will run her sewing machine or her churn, and factories will turn their shafts and wheels by the same power. In every activity of his life that man and his family and his neighbors will have to pay toll to those who have been able to monopolize the great motive power of electricity made from water power, if that monopoly is allowed to become established."[23]

WITHDRAWAL OF OTHER RESOURCES

Hostility to the reservation policy was increased by the temporary withdrawal of lands, not only timber lands, but coal, oil, and gas, power sites, and public watering places. Roosevelt inaugurated the policy of withdrawing land pending the enactment of further legislation for its best use, and considerable areas were thus withdrawn at the time Taft became president. Taft questioned the legality of this

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1915, 123 et seq.: *Cong. Rec.*, 60 Cong. 1 sess., p. 167; 61 Cong. 3 sess., 1856, 3771; 62 Cong. 2 sess., 2991, Appendix, 591 et seq.; 63 Cong. 1 sess., 1974; 64 Cong. 1 sess., 6388, 6391; *No. Am. Review*, 191, 472; Apr., 1910. See also the Report of the Commissioner of Corporations on Water Power Development in the United States, 1912; and Senate Doc. 274; 62 Cong. 2 sess.

[23] *Farmers' Bul.* 327.

action, but instead of restoring the land to the public domain, he secured from Congress in 1910 an act specifically authorizing such withdrawals. The effect of this legislation, it later developed, was to restrict rather than enlarge the authority of the President, for the Supreme Court later held that previous legal authority was sufficient. In June, 1916, the total withdrawals amounted to nearly 50,000,000 acres, of which 45,935,954 acres were coal and oil lands, 2,352,652 acres were power sites, and 193,272 acres were public water reserves. Naturally this policy brought various interests, other than the timber interests, into a position of hostility to the reservation policy.[24]

OPPOSITION TO SAVING FOR POSTERITY

An argument that interference with the immediate development of the West might yet be a good thing for posterity, has not appealed to some of the western men, for some of them have not been at all concerned about the interests of posterity. As Senator Teller said in Congress a decade ago: "I do not believe there is either a moral or any other claim upon me to postpone the use of what nature has given me, so that the next generation or generations yet unborn may have an opportunity to get what I myself ought to get."[25]

DISCRIMINATION AGAINST THE WEST

A great many complaints have always been made that the West is being denied the same advantages the East had in an earlier period. As Senator Carter once expressed it: "The state of Maine and the state of Illinois and Iowa and Missouri and Wisconsin enjoyed, through the operation of the laws that have heretofore obtained within their respective boundaries, the full benefit of the natural resources the great Creator had placed there; but these states of the Rocky Mountains and the western slope, where nature presents the hardest conditions settlers have ever faced on this continent, must conduct their local affairs subject to a tribute to the Federal government upon the natural resources within their borders."[26] Representative Martin of Colorado observed that "the less public domain and the less natural resources a member [of Congress] has in his state, the more enthusiastic he is about conservation." In similar humor, Representative Taylor of the same state denied that the land and resources of the West are the common property of the people of the country. "Those resources," he announced in Congress, "are the property of the people who go there and develop them. If you want a share of them, come out to our country and help us reclaim the forest and the desert land and develop the water power. We will extend to you a hearty greeting, and you are welcome to your share of it. But you have no right to remain cosily in the East and put a tax upon our industry in trying to build up those great western states."[27]

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[24] *Stat.* 36, 583, 847, 855; 37, 497: *Report*, Sec. of Int., 1916, Vol. I, 174, 510: "Land Decisions," 37, 277; 41, 528: Wilcox vs. Jackson; 38 U. S., 498: Wolsey vs. Chapman; 101 U. S., 755.

[25] *Cong. Rec.*, Feb. 26, 1909, 3226.

[26] *Cong. Rec.*, Feb. 26, 1909, 3245.

As to the logic of this plea, it can only be said that the proper policy for the government is not so much a question of abstract "justice," as of expediency. The fact that the East exploited its lands without restriction is no reason why the West should do the same thing, unless the *results* have demonstrated the wisdom of that policy. As far as agricultural lands are concerned, results have justified the policy the government pursued, but as to natural forest lands, coal, oil, gas, and mineral lands, perhaps also power sites, it seems that the government should have adopted the policy of reservation at the start. The fact that the country adopted an unwise policy with respect to such lands at the time the eastern states were being settled is no reason for clinging to that policy after its evil effects have become apparent.

OPPOSITION TO GAME PRESERVATION

A few of the western men evinced considerable hostility toward the work of the government in game preservation. Several big game preserves have been established outside the national forests, under the jurisdiction of the Biological Survey, and three have been created, by special act of Congress, within the national forests. The Forest Service is also trying to protect certain kinds of wild game in the other national forests. Senator Heyburn was particularly indignant about this policy. "It was suggested here," he complained, "that the government had great game preserves, and that the beautiful deer might be preserved from destruction. I would rather have one Alderney cow than all the herds of deer that you could put upon acres of ground. I have no doubt that the beautiful spotted fawns would look more beautiful to our friends from the East, when they come out there, but they perhaps would not care a snap about seeing the western people driving up the lowing kine. They would rather see them shooting deer; but we are talking about practical life and practical government and practical things, and we are substituting cities for forests; we are trading off the timber for civilization, and you come out there and undertake to stay our hand!" Senator Borah complained of the elk crowding the sheep out of the reserves. Governor Richards of Wyoming suggested that the West wanted "to raise agricultural products, not wolves, bear, and other game for the purpose of making Wyoming a game preserve for eastern sportsmen."[28]

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[27] *Cong. Rec.*, Apr. 7, 1910, 4376; Mar. 2, 1911, 4017.

There is room for a difference of opinion as to the advisability of establishing extensive game preserves; but it is to be noted that the movement for the preservation of our wild life has made a great deal of headway in the past decade, and almost no session of Congress passes without a number of bills being introduced for the establishment of such preserves.

LOSS OF TAXING POWER

Few arguments against the reservation policy have been urged as often as the argument that it causes a serious loss in the taxing power of the states and local units in the West, and, by reducing the number of taxpayers, throws a heavy burden on the few who reside in or near the forest reserves.

It was as a compensation for this loss in taxing power that the Agricultural Appropriation Bill of 1906 provided for the payment of 10 per cent of the revenues from national forests to the various states and territories, for the benefit of the public schools and roads of the counties in which the reserves were situated. This was not satisfactory to the West, however, and in 1908, the amount was raised to 25 per cent; but even 25 per cent was not enough, and repeated efforts have been made since to have this further increased.

A very determined effort was made in 1910 to amend the Agricultural Appropriation Bill to increase this contribution from 25 to 35 per cent. The amendment was added in the Senate Committee on Agriculture and Forestry, and passed the Senate without difficulty, but the House, taking its usual stand, refused to agree to it. Representative Mann of Illinois immediately opposed this "hold up," as he called it, on the ground that 10 per cent of the annual revenue of any business was a very large per cent. "Doubtless there are cases where it is a difficult thing to maintain schools without the help of the general government," he said, "but we gave them school lands for the purpose of maintaining schools, which are neither needed nor maintained. We build the roads in these forest reserves, as a general proposition. . . . There is not a farmer in any forest reserve state that would not think he was being robbed at the point of a pistol if he had to pay 35 per cent of his gross receipts as taxes. It is expected that we shall pay to the states 35 per cent of the value of the timber which we sell, after we have let it grow, after we have kept the fires out, after we have protected it for a long time at national expense. I have never seen a proposition which seemed to me so rank in the way of giving preference to one part of the country over another."

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[28] *Cong. Rec.*, Mar. 7, 1910, 2845; May 15, 1912, 6485: *No. Am. Review*, 177, 217: Cross Reference, pp. 302-305.

Morse of Wisconsin pointed out how unjust such a provision would be in its application to the Appalachian forests, where the government was already buying the lands for more than they were worth. Stanley of Kentucky declared that this attempt to "mulct the national treasury," if it were "proposed as a matter of substantive law instead of being done by subterfuge," would not get twenty votes in the House. Other men were almost equally outspoken in their opposition—Hitchcock of Nebraska, Keifer of Ohio, Tawney of Minnesota, and Payne of New York. Scott of Kansas, who had the appropriation bill in charge, was strongly opposed to the amendment, but stated that it was the belief of the House conferees that it would be impossible to get the Senate to agree to the conference report unless the increase were allowed.

Many of the western congressmen rallied to the support of this proposition. Englebright of California mentioned one county in California in which the government forest reserve included $50,000,000 worth of property, yet had sold only $445 worth of timber and so had turned over only $100 to the state in lieu of taxes. Martin and Rucker of Colorado argued that 35 per cent was not enough, since the other states had got all. As Martin expressed it, "We regard it in the light of having returned to us 35 per cent of what you have first taken away from us." Appealing to Payne of New York, he continued: "Your state has had the benefit of its public domain and all its resources, and now you propose to take away all that remains of the public domain in our state, its water power, its coal lands, its oil lands, its phosphate lands, and everything else, and turn them over to a Federal bureau to milk them perpetually as a source of Federal profit." Martin of South Dakota enlarged on the "burden of maintaining order" in the reserves, which, of course, was saddled on the states. Taylor of Colorado called upon Congress to "give the pioneer settlers of the West a fair share of the hard earned fees they are paying into this forest refund, and let them build their roads, maintain their schools, educate their children and build up the West as you have the East." Mondell claimed that the localities should have a return somewhere near what they would receive if the lands were in private ownership and taxed, and pointed out that it was the people of the West who paid the grazing fees, and, in fact, all the revenues of the forests. Hawley of Oregon argued that since the people living near the forest reserves were of great assistance in fighting fire, they ought to be compensated by a larger percentage of the forest reserve receipts. Even one eastern man, Sulzer of New York, expressed sympathy with the claims of the West.

In spite of the efforts of these men, the House absolutely refused to accede to the 35 per cent amendment, and sent it back to a conference committee twice. The conference committee was long unable to come to any agreement. The House conferees—Scott of Kansas, Cocks of New York, and Lamb of Virginia—stood out for the elimination of this amendment, and the Senate conferees—Dolliver of Iowa, Warren of Wyoming, and Money of Mississippi—insisted upon its retention. After considerable wrangling, the Senate finally receded from its amendment.[29] This attempt of the western men to secure more of the national receipts for schools and roads thus failed, but that did not stop the complaints, nor the efforts to secure a larger share of the revenues.

[29] See debates on H. R. 18162; 61 Cong. 2 sess.

Considerable complaint was made because the roads built through the forests were inadequate, some men claiming that western communities often had to bear the cost of building these roads, since the government did not do it, and some roads were necessary to preserve adequate communication with the rest of the world. In 1912, the Senate inserted an amendment to the Agricultural Appropriation Bill, providing that in addition to the 25 per cent for roads and schools in the counties where the national forests were located, another 25 per cent should be used to build roads and trails in the national forests themselves. The House refused to agree with this, but finally 10 per cent was secured for this purpose. Efforts have been made since to get this increased but thus far without success. In 1916, however, Congress appropriated $10,000,000 for the construction of roads in the national forests, $1,000,000 to be available each year for ten years.[30]

JUSTICE OF COMPLAINTS REGARDING LOSS OF TAXING POWER

The question as to the justice of the complaints regarding the loss of taxing power, and the consequent excessive burden of maintaining schools and roads, etc., is not free of difficulty. Senator Heyburn once claimed that in one county in Idaho the taxes paid by private citizens amounted to $190,000, while the government contribution was only $767.87, although the government owned two thirds of the property in the county. "In that county," he said, "the men who are there to represent the government receive, first, the benefit of the law that affects them in their personal and property rights. They receive, next, the benefit of the local law, the state law, that protects these forests from fire. The state of Idaho did thus, pursuant to the laws of the state of Idaho, expend $10 where the government expends $1 in the protection of the government's timber. Upon that vast area, and that reserve is nearly twice as large as some of the states of the United States, there is just as much and the same necessity for protection of the law administered at the expense of the state and counties as there is elsewhere. There are post offices, villages, public schools, and other institutions of public benefit maintained upon the very forest reserves themselves. . . . Would it be fair to have a non-resident landholder in the state exempted from contribution to the expenses of the state and the local government? Should the United States be exempt from contributing to the cost of its own protection and the protection of its own property?" Senator Heyburn once claimed that it cost one county in Idaho $8000 in one year to try cases that originated upon the forest reserves.[31]

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[30] S. Report 696; 62 Cong. 2 sess.: *Cong. Rec.*, May 30, 1912, 7411; Feb. 10, 1913, 2957; Feb. 27, 1913, 4137; Mar. 10, 1914, 4629: *Stat.* 37, 286. See also H. R. 61, H. R. 1667, H. R. 8476; 63 Cong. 1 sess.: H. R. 20994; 62 Cong. 2 sess.: H. R. 27012; 62 Cong. 3 sess.: *Cong. Rec.*, Jan. 24, 1913, 1949, 1950: *Stat.* 39, 358.

Representative Humphrey, in connection with an effort a few years later to secure an investigation of the Forest Service, claimed that the state of Washington had received $14,400 a year where the taxes on the timber would have yielded at least $7,598,500 annually.[32] Representative Johnson of the same state asserted that it cost one county in Washington $100,000 to "help out the Forest Service"; while the 25 per cent contribution from the government amounted to $24.65. Speaking of the withdrawal of 700,000 acres of so-called agricultural land from the Olympia National Forest in 1901, Johnson admitted that the land fell mainly into the hands of the big timber owners; but he insisted that "the money they paid the settlers was the money that kept that part of the country going" and that the "wages they pay in camps, mills, and offices is to this day the principal support of the country in question. But for the withdrawal of 1901, another county would have been bankrupted."[33] Hawley of Oregon claimed that his state was getting $50,000 a year in lieu of about $1,000,000 which she would have got by taxation, had her timber lands been in private hands.[34]

There is no doubt some justice in these complaints. The Forest Service admits that in some cases the national forests impose a heavy burden on settlers, and as Mr. Graves puts it: "There is little comfort to the man who, with a handful of neighbors, must pay heavy taxes for roads, schools, and other purposes, in the thought that at some time in the more or less indefinite future, conservation will mean increased local prosperity. He bears his burdens now. Though the forests had been bought up and were being held undeveloped by speculators in order to take toll of the public later, he would at least, if they were in private hands, be able to make them pay their share toward the expenses of local self-government."[35]

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[31] *Cong. Rec.*, Mar. 7, 1910, 2842; Mar. 8, 1910, 2893.

[32] *Cong. Rec.*, 63 Cong. 1 sess., 1867.

[33] *Cong. Rec.*, 63 Cong. 1 sess., 5972; 63 Cong. 2 sess., 4635.

[34] *Cong. Rec.*, 64 Cong. 1 sess., 6404.

The loss in "taxing power" has generally been grossly exaggerated, however. The complaints of such men as Heyburn on this as on other subjects, have been biased in spirit and exaggerated in statement of fact. While some communities suffer hardship, others doubtless get more from the 25 per cent fund than they would from taxation, if the land were in private hands, and as time goes on this will become more and more generally true. Mondell once admitted that he believed the 25 per cent would eventually yield just as much for the western states as they would get from taxation.

Contributions to the western states from forest reserve receipts in 1916 were as follows:

State	School and road moneys (25 per cent)	Road and trail moneys (10 per cent)
Montana	$ 79,589.78	$ 31,835.91
Idaho	75,651.15	30,260.46
California	67,611.87	27,044.74
Arizona	59,807.89	23,923.16
Colorado	59,218.60	23,687.44
Oregon	49,675.83	19,870.33
Utah	48,675.96	19,470.38
Wyoming	43,086.86	17,234.75
Washington	37,445.56	14,978.23
New Mexico	31,786.46	12,714.58
Nevada	16,244.53	6,497.81
South Dakota	12,988.11	5,195.25

The states of Arizona and New Mexico received additional shares of national forest receipts amounting to over $40,000 for their school funds, on account of school lands included within national forests.[36]

The growth in the amount available for the states is indicated by the following table, showing the total contributions for the road and school fund since 1908—the year when this contribution was raised from 10 to 25 per cent:

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[35] *Cong. Rec.*, 63 Cong. 1 sess., Appendix, pp. 465 et seq.

[36] *Report*, Sec. of Agr., 1916, 278.

1908	$ 447,063	1913	$ 632,141
1909	441,552	1914	639,893
1910	510,907	1915	649,067
1911	515,073	1916	610,797
1912	554,380	1917	695,541

Much of the reasoning regarding this loss in taxing power has been superficial, or worse. In figuring what revenues *would have been* enjoyed if the reserves had been subject to taxation, the assumption has usually been made that the *standing timber* would be taxed, according to the unscientific system common in the United States. A rational tax should of course be levied mainly on the *annual cut*, rather than on the standing timber; and, if it is true, as even government officials are now inclined to admit, that lumbermen have not generally made any profits during the past decade (previous to the outbreak of the world war), it appears that the tax on the annual cut should in justice be a fairly light tax. This was recently pointed out in Congress by Representative McLaughlin of Michigan, when Humphrey and Johnson were bewailing the fact that many sawmills in the West were being run at a loss, and that private individuals could hardly afford to own timber lands. McLaughlin pertinently suggested that if private individuals could not afford to own lands, they could hardly afford to pay taxes on the lands.[37] Even if it had been possible to levy a heavy yield tax on timber lands, it would have yielded little revenue in some sections, for much of the government timber is inaccessible at present prices.

Much of the reasoning on the subject takes only a short-time view of the matter. If the government timber were turned over to private exploitation, there can be no doubt that most of it would be exploited more rapidly than it is now, and that some of the communities involved would enjoy an era of what Americans commonly regard as "prosperity"; but if such a policy resulted in the speedy and wasteful destruction of this timber, such a "prosperity" would be short-lived.

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[37] *Cong. Rec.*, Apr. 19, 1916, 6459.

The government, in its forest reserve policy, is aiming at long-time results.

It is commonly assumed in these complaints about the loss of taxing power, that if the national forests were turned over to private ownership, and sawmills were built to saw up the timber, the only effect on the financial balance sheet of the community would be an increase in tax revenues. No attention has usually been given to the fact that these mills would need a large number of employees, and that, with an increase in population, would come an increased expense for enforcing justice, providing schools, etc. These expenses might not increase in the same proportion as the revenues, but they would certainly increase somewhat.

As a matter of general reasoning, it seems probable that conservation does not involve any general sacrifice for the present or for future generations, even in the West. It is true that it may result in a slower rise in rents and land values, and may at first involve all the disadvantages that arise from sparseness of population, but in some regions it has not retarded the growth of population, and even where it has, it must be remembered that sparseness of population has its own advantages. Perhaps the average standard of comfort in the West is just as high as it would be if there had never been any national forests; and if it is true that the reservation policy means a wiser and more economical use of resources, the standard of comfort in the long run will be higher than would otherwise have been possible.[38]

Of course any policy that hinders rapid growth and expansion would seem most iniquitous to many people of the West, because western people are characteristically "boosters" of the most enthusiastic type, keenly intent upon "growing" as rapidly as possible, and sometimes careless as to whether their development is along safe and sane lines or not.

It is not the policy of the Forest Service to shut the people out of the national forests. The general policy is to put to its most productive use every foot of land in the forests. Those areas most valuable for agriculture are to be used for that purpose; those most valuable for mining should go to the miner; those most valuable as water power sites or for irrigation should be put to the proper use. There can be only one way to accomplish this development, and that is to get farmers to farm land, miners to prospect and develop mines, water power companies to build construction works, lumbermen to buy timber, stockmen to put in their herds to feed on the grass. In other words, people are needed in the forests to use the resources.

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[38] See an able article by Professor W. I. King, in the *Quarterly Journal of Economics*, May, 1916, 595.

It should be noted finally, that, even if the complaints of hardship from loss of taxation be given full credence, it is not probable that the best way to help unfortunate communities would be to increase the percentage of national forest receipts, for where little use of the forests has as yet been developed, the receipts would not do much good even if they were all given. The remedy for such a situation must be found in some other way. It would be unwise for the government to increase this fund above 25 per cent; but it is not at all impossible that the western men may yet secure an increase. The proposition has a "pork barrel" flavor which might make an irresistible appeal to Congress, under certain circumstances. Furthermore, it presents a rather attractive and indirect way of attacking the reservation policy. If the opponents of the national forests could get something for their constituents, and at the same time increase the "insolvency" of the reserves by cutting down the share of revenues available for their protection, and thus turn some of the eastern men against them, they would be attacking the forests in the safest and most effective way. It is not certain that the average congressman from the West gains public favor, even among his "home folk," by attacking the reserves directly, but if he can attack them in the guise of a statesman seeking "pork," he can hardly fail to win votes, and at the same time perhaps seriously prejudice the reserves. It is notable that several of the recent attacks on the reservation policy have been inaugurated by an attempt to secure an increase in this fund.

INCLUSION OF STATE LANDS IN THE NATIONAL FORESTS

Frequent complaints have been made regarding the inclusion of state lands in the national forests. It has been claimed that, in some cases, the value of state lands has been reduced to almost nothing; and in almost every session of Congress a great many bills are introduced to "adjust the claims of the States and Territories to lands within National Forests." The Forest Service has been exchanging lands outside the reserves for state lands included wherever it is possible to do so, however, and it is hoped that this complaint will be heard less frequently in the future. It is to the advantage of the Forest Service as well as the states that the reserves should be consolidated wherever possible. Wherever Congress has authorized exchanges they are being made.[39]

ROBBING THE WESTERN FORESTS FOR THE EASTERN FORESTS

Within recent years there has been some complaint that the government is "robbing" the western forests for the benefit of the new Appalachian reserves. As Mondell once expressed it: "We are now trying to maintain a good-natured attitude toward the Appalachian Forest Reserves, but I fear that we cannot, if gentlemen insist on robbing our reserves of proper appropriations in order to appropriate money for the maintenance of the Appalachian Reserves. I notice this, that while you take this money away from our reserves at the rate of 2 cents an acre, . . . you apply it to the Appalachian Reserves at the rate of 20 cents an acre, so that it is going to cost, right off the bat, 10 times as much per acre to take care of this Appalachian land as it does to take care of the western forest land."[40]

OBJECTION TO AN "ALIEN GOVERNMENT."

Just as in an earlier period, many western people have been complaining that the reservation policy subjects them to the exactions of a bureaucratic, alien government. The West is said to be "relegated to the position of Federal provinces," governed by a "gigantic feudal landlord, ruling over unwilling tenants by the agency of irresponsible bureaus; traversing every local right, meddling with every private enterprise." The entire policy is pronounced a "transplanted exotic from monarchial Europe, wholly out of harmony with American institutions." "Mr. Pinchot makes his own laws, construes them and executes them," declared E. M. Ammons—later governor of Colorado—in a speech a few years ago. "He is the legislative, the judiciary

[39] *Report*, Sec. of Agr., 1909, 399; 1912, 473; 1916, 45: *Report*, Forester, 1914, 27; 1915, 20.

[40] *Cong. Rec.*, Mar. 9, 1912, 3108.

and the executive. . . . He is in fact a very sovereign"; while as to the people of the West, "their souls are not their own; their American manhood is subdued; there is ringing in their very souls a hatred of this government." It has often been claimed that the Forest Service, in its management of the reserves, was accustomed to disregard the state laws.[41]

[41] *Cong. Rec.*, Apr. 28, 1909, 1567; May 14, 1909, 2019; Feb. 1, 1910, 1351; May 19, 1910, 6526-6529; Feb. 27, 1912, 2529: *No. Am. Review*, 191, 465; Apr., 1910.

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CHAPTER IX

HOSTILITY TO THE NATIONAL FORESTS IN RECENT YEARS (CONTINUED): CRITICISM OF THE FOREST SERVICE

THE complaints mentioned above were directed at the general policy of reservation. There were also many complaints, not regarding the policy itself, but regarding the way in which that policy has been carried out, complaints of inefficiency and malfeasance on the part of the Forest Service.

THE "INSOLVENCY" OF THE NATIONAL FORESTS AND ALLEGED EXTRAVAGANCE OF THE FOREST SERVICE

The alleged failure of the national forests to support themselves has brought much criticism in recent years. Pinchot predicted in 1907 that within five years the reserves would be self-supporting, but enemies of the reserves have produced figures purporting to show that every year but one during the next decade, there was a deficit of from $300,000 to $1,400,000.[1]

This so-called "insolvency" of the reserves was attributed to the extravagance of the Forest Service; and complaints on this point have

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[1] RECEIPTS FROM NATIONAL FORESTS AND AMOUNTS EXPENDED FOR MAINTENANCE OF FORESTS FROM 1908 TO 1917 INCLUSIVE

	RECEIPTS	EXPENDITURES FOR MAINTENANCE	DEFICIT
1908	$ 1,788,255.19	$ 1,622,413.17	$ —165,842.02
1909	1,766,088.46	2,093,781.68	327,693.22
1910	2,041,181.22	2,791,275.62	750,094.40
1911	1,968,993.42	3,395,730.77	1,426,737.35
1912	2,109,256.91	3,433,285.36	1,324,028.45
1913	2,391,920.85	3,396,762.44	1,004,841.59
1914	2,437,710.21	3,337,048.83	899,338.62
1915	2,481,469.35	3,261,455.16	779,985.81
1916	2,823,540.71	3,427,140.41	603,599.70
1917	3,457,028.41	3,868,562.60	411,534.19
Total	$ 23,265,444.73	$ 30,627,456.04	$ 7,362,010.39

come not only from Mondell and Heyburn and the other western anti-conservationists, but from farther east—from Tawney and Steenerson of Minnesota, Fitzgerald, Perkins, and Bennett of New York, Clark and Stone of Missouri, Haugen of Iowa, Hamilton of Michigan, and others.

The extravagance of the Forest Service is alleged to have been shown in various ways. Mondell claimed in 1911 that not over 15 per cent of the annual appropriations for the Service in the previous six years had been used directly in protection of the reserves, a considerable share of the rest going for an unnecessarily large clerical force, traveling expenses, for unnecessary junkets, and for the preparation of newspaper and magazine articles for advertising the Forest Service.[2] Various men have complained of the payment of traveling expenses of forestry officers, who "stand before the national geographic societies and other learned societies with impressive titles and tell them how the world ought to be run."[3] In 1908, an amendment to the Agricultural Appropriation Bill provided that none of the money appropriated should be used to pay traveling expenses of any forest officer except on business directly connected with the Forest Service; but it was often charged even afterward that government funds were used to pay the expenses of officials who were merely going about lecturing to conventions and associations.[4]

The "press bureau" of the Forest Service has often been criticised, the charge being that the Service devotes considerable time to the preparation of bulletins and articles, often of a self-laudatory nature, to send out to the newspapers and magazines. Mondell pointed out in 1910 that the Forest Service had a mailing list of 750,000 names.[5] In 1908, the appropriation bill was amended to prevent the use of money for the preparation or publication of such articles, but it has been charged that the Forest Service often evaded this.[6]

JUSTICE OF THESE COMPLAINTS

The weight to be given to these complaints of extravagance in the

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[2] *Cong. Rec.*, Feb. 2, 1911, 1836.

[3] Speech of Senator Heyburn, *Cong. Rec.*, Mar. 1, 1911, 3774.

[4] *Stat.* 35, 259.

[5] *Cong. Rec.*, Feb. 1, 1910, 1359.

[6] *Stat.* 35, 259.

Forest Service will depend somewhat on the point of view taken. Compared with private business enterprise at its best, probably nearly all government bureaus are inefficient and extravagant; but the Forest Service has been one of the most efficient bureaus in Washington. As a matter of fact, that is one of the reasons why the Service was subject to so much criticism during Pinchot's régime. The Service was going ahead with much the same energy and enterprise that is supposed to characterize private business, and this brought it into conflict with interests which were represented in Congress. Officials and bureaus that follow the humdrum, cut-and-dried methods of the average office in Washington are seldom or never criticised. As a rule, nothing speaks so well for a public official or department as a generous amount of criticism from the politicians.

The figures given above, to show the "insolvency" of the reserves, do not really prove anything. The reserves were self-supporting in 1908, and they might have been maintained on that basis had that been a wise policy to pursue. In 1908, however, Pinchot recommended a change of policy, recommended that there should be provision for more effective protection and administration of the reserves, even if it resulted in a deficit, and this policy was adopted. It should also be noted that some of the figures given for expenses include, not only the actual cost of forest administration, but a great many items—salaries, rents, cost of investigative work, etc.—which have nothing directly to do with the national forests.

The statement that only 15 per cent—later 25 per cent—of the money appropriated went directly to the protection of the forests, is at least misleading, for it is difficult to say what money is used *directly* in the protection of the reserves. It can hardly be said that the work of a clerk or draftsman is less essential to the protection of the forests than the work of a ranger. A great many clerks there are in any government office, but this seems to be required by the "red tape" of officialdom. When Henry Graves was made chief of the Service, he took some steps toward a greater decentralization of the administration and tried to use more of the appropriation for protection and investigation.[7]

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[7] *Forest Quarterly,* 12, 397 et seq.

There might easily be a question as to the justification for any considerable expenditure for expenses of officials going to deliver lectures. A number of members of the Forest Service have at different times performed such work, but it was usually incidental to other work. As a rule, addresses before educational institutions, associations of wood users, commercial and civic organizations, and general audiences, are made by men en route and without cost to the Forest Service, except the expenditure of time involved.[8] Even so, however, this has not been an altogether negligible item, for, as late as 1916, 425 addresses were given by members of the Forest Service. Whether this be a proper function of the Forest Service or not is a question concerning which there may well be an honest difference of opinion.[9]

Regarding the preparation and publication of articles by the Forest Service, much the same must be said. Almost all investigators employed by the Forest Service who have done work of any considerable importance, have doubtless been engaged at some time in writing matter for publication, either in official bulletins or in magazines or newspapers. The Forest Service always has a number of men employed in investigative work and it is desirable that the results of such work should be made available to the public. The Service has for many years had in its employ one or more men engaged primarily in editing manuscripts for official publication, and these editors have sometimes written matter for publication, both in official bulletins and circulars and in periodicals and newspapers. At times the Service has had men whose function was chiefly or entirely to diffuse information through the press. At one time the Service had a mailing list of 750,000 names and from five to seven men were employed in editing and sending out material. That the work of attending to this mailing list is an expensive matter, may be inferred from the fact that the installation of an addressing machine by the Forest Service in 1908 is reported to have reduced the clerical force of the Service by thirty persons.

In some ways, this publicity work has been about as much needed and as valuable a line of work as any that the Forest Service performs.

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[8] H. Doc. 681; 62 Cong. 2 sess.: *Report*, Sec. of Agr., 1912, 466 et seq. See also S. Doc. 465; 60 Cong. 1 sess.

[9] H. Doc. 681; 62 Cong. 2 sess.: *Report*, Sec. of Agr., 1912, 466 et seq. See also S. Doc. 485; 60 Cong. 1 sess.: *Report*, Chief of the Division of Forestry, 1891, 195.

Twenty years ago, the average man in the United States, even the average educated man, had absolutely no idea as to what forestry meant. The average man looked upon forestry, as a prominent forest official once said, as "something in the nature of a frill for rich men embellishing their estates, or a combination of tree planting and the 'Woodman, spare that tree' idea." Pinchot, and others with him, saw the need for education of the public, saw the desirability of utilizing the press of the country as a means of disseminating information. It was one of Pinchot's virtues that he was a good advertiser, for if he had not been he never could have accomplished all that he did. Naturally some of the material published has tended to "boom" the national forests, and that has brought criticism.[10]

The Forest Service has tried to diffuse information in various ways: by advice to individuals, given on the ground, or by correspondence; by the preparation and distribution of publications; by public addresses; by the loan and sale of lantern slides, pictures, and other material for the use of lecturers, writers, and others; by coöperation with teachers, public school officials, and others connected with educational work; by exhibits at expositions; and by the preparation of official information concerning forestry, in brief typewritten or mimeographed statements, which are given to the newspapers for publication.

The Forest Service could doubtless make the reserves pay their own way, if such a policy seemed wise. If the Service were to increase the grazing fees sufficiently, make a special effort to sell a larger amount of standing timber, and cut out, or greatly reduce, the amount expended for permanent improvement, investigative work, etc., it could doubtless make the reserves pay a net profit to the government; but the Forest Service has wisely declined to adopt any such course. Probably the grazing fees should be generally increased, but any decrease in expenditures for permanent improvements would be shortsighted economy. Perhaps most of what is spent on the forests each year should be regarded as an investment. This applies not only to expenditures for road and trail construction but likewise to fire protection.[11]

[10] *Reports,* Sec. of Agr., 1907, 347; 1908, 438 et seq.; 1909, 407 et seq.; 1916, 190.

[11] *Am. Forestry,* May, 1917, 305: *Am. Lumberman,* May 27, 1916, 58.

THE TIMBER SALE POLICY OF THE FOREST SERVICE

The receipts from timber sales could perhaps be augmented, but in considering this possibility, it is necessary to go briefly into the question of the timber sale policy of the government, for this has long been the object of severe criticism and, perhaps strangely, on diametrically opposite grounds. Some critics have asserted that the price charged by the government was too high, while others, although not so many, have charged that the price was too low.

With the increase in lumber prices since 1897, it was inevitable that many people should suspect the working of a lumber trust and that they should wonder why the government did not at least try to keep prices down, by selling its own timber at a price somewhat below those established by the so-called "lumber trust." The charge has often been made that the government not only did not undersell the "trust," but actually established a price somewhat higher than that of private owners in the same vicinity. E. M. Ammons, later governor of Colorado, criticised the Forest Service for its method of selling timber to the highest bidder, and charged that the "lumber trust" bid just high enough to get it, and then added correspondingly to the consumer's price. Senator Heyburn called attention to a conference between the forestry officials and the lumber operators to fix a scale of prices, and asserted that the Forest Service had increased prices 100 per cent. Representative Humphrey of Washington charged the Forest Service with being largely responsible for the timber "monopoly" in the West, and alleged that the big "interests"—Frederick Weyerhaeuser, J. J. Hill, and others—were among the most prominent influences in the conservation movement. He asserted that the "so-called forest-conservation movement" had "operated solely to bull the lumber and timber market."[12]

Much of the complaint regarding the high price set by the government on its timber was not made in any spirit of sincerity. Men who disliked the system anyhow found here a good line of attack—one which would make a strong bid for popular support. This is clearly indicated by the following extract from a confidential letter which the

[12] *Cong. Rec.*, May 19, 1910, 6527; May 16, 1912, 6545; Mar. 10, 1914, 4621, 4628; Mar. 12, 1914, 4759, 4760; June 2, 1913, 1865; Apr. 18, 1916, 6388: H. Res. 114; 63 Cong. 1 sess.

board of governors of the National Lumber Manufacturers' Association circulated among the members of that association in July, 1913:

"Dear Sir: (Confidential.)

"There is good reason to believe that an attack is to be made upon the administration of the Forest Service, with particular reference to the present methods of selling timber from the national forests.

"For your confidential information, will say that certain members of Congress, whose antagonism to the Forest Service is well known, are said to be planning to make the charge, as soon as pending tariff and currency legislation is out of the way, that the policy of the Forest Service in disposing of government timber is dictated, or at least influenced to a degree, by timber owners."[13]

Representative Johnson of Washington criticised the Forest Service for selling stumpage too cheap. He admitted that the price of the government was nominally higher than the market price, but said it was really lower because the government gave purchasers five years without interest to remove timber purchased. Johnson was in close touch with lumber interests; in fact, he apparently had lumber interests of his own, and this would easily explain his attitude.[14]

On the whole, there is exceedingly slender basis for the criticisms of the policy of the Forest Service with regard to timber sales. In the first place, the Service is required by *law* to sell at actual market prices, and is not subject to criticism for following the provisions of the law. Furthermore, even if the law did not require this, it would be the only wise policy to sell at the regular market price. If the price were raised above the market price, the government would be unable to sell at all; a revenue of over a million dollars a year would be lopped off; and a large amount of mature timber would be left to rot in the forests. Much of the government timber is mature, some even deteriorating. Even at the price set, the Forest Service has never sold anything approximating the annual growth of the national forests; in fact, it has been stated that it never sold as much as one sixth the estimated annual growth previous to 1913. If, on the other hand, the price were put below the prevailing market price, it would only tend to increase the demoralization which has existed in the lumber industry much of the time during the past ten years.(1910-1920)

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[13] "Lumber Industry," Pt. IV, 61 et seq.

[14] *Cong. Rec.*, Apr. 18, 1916, 6390, 6392 et seq.

It is not certain that the government revenues could be *greatly* increased by reducing the price, even if that were possible. In those districts where the amount of government timber is not large enough to affect the market greatly, no great increase in sales could be expected, no matter what the price, and in regions where the government timber is an important factor in the market, reduction in price would simply compel private owners to reduce too, and thus leave the amount of government sales somewhat the same as before. It is stated that the reason why the government has not sold more is not that the price is too high, but rather that it is impossible to dispose of inaccessible blocks of timber at any price. Much of the government timber is comparatively inaccessible, and large investments are necessary to its development on any considerable scale.

Even from the point of view of the consumer, very little is to be said for a reduction in the government price of stumpage. Unless the amount of such timber is so great as to have an important influence on the market, it is likely that if the government lowered its price the fortunate purchasers of this cheap stumpage would nevertheless sell their product at the regular market price, and pocket the profits accruing. Under any circumstances, it is of course the long-run interests of consumers rather than their mere immediate interests which should be considered.[15]

It might be possible for the Forest Service to increase its revenues somewhat by charging for the timber which it has for many years been giving away free to settlers; but the amount of timber thus given away has not been very great—120,000,000 feet in 1916—and even if it were a very considerable item, it is not certain that it would be just or expedient to charge settlers for it.

As already stated, the Forest Service should increase the grazing fees. The rates allowed in the past have hardly been fair to all concerned. Not only has the government been meeting an annual deficit while the stockmen were getting the grazing for half what it was worth, but the states lose a share of what they ought to receive under the present scheme of apportionment. Thirty-five per cent of the loss falls upon them. The Forest Service was planning a gradual increase in rates at the time the recent war broke out, but this was postponed because of war conditions. The livestock associations protested vigorously against the increase.[16]

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[15] *Report*, Sec. of Agr., 1908, 422; 1912, 491; 1916, 157 et seq.: *Report*, Forester, 1914, 9, 10. See also "Some Public and Economic Aspects of the Lumber Industry," by W. B. Greeley; Dept. of Agr., Office of Sec., *Report* 114.

THE FOREST LIEU ACT AGAIN

The difficulties arising under the Forest Lieu Act of 1897 have been discussed in a previous chapter; but it is necessary to note here that those difficulties did not end with the repeal of the act in 1905; and even within very recent years, there has been a great deal of discussion of this act, largely in the way of a criticism of the Forest Service for a part it was alleged to have played.

Senator Heyburn always maintained that the evils of the Forest Lieu Act should be attributed to Secretary Hitchcock, and to the conservation movement generally. Humphrey of Washington later took a similar position, especially charging the Forest Service with having backed the bill for the creation of the Mount Ranier National Park, and asserting that it was the conservationists who blocked the passage of the act repealing the Forest Lieu Act until the Northern Pacific could get its scrip located.

The merits of the Forest Lieu controversy have been discussed in a previous connection,[17] but it may be pointed out here that only a vivid imagination could trace any of the evils of the Forest Lieu Act to the door of the Forest Service. Previous to 1905, the forest reserves were under the jurisdiction of the Department of the Interior, while the Division of Forestry—later known as the Bureau of Forestry, and after 1905 as the Forest Service—was in the Department of Agriculture. The officials in the Division—or Bureau—of Forestry could hardly be criticised for not protesting against something which was officially none of their business.[18]

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[16] *Am. Forestry*, Mar., 1917, 177: *Am. Lumberman*, May 27, 1916, 58.

[17] Cross Reference, pp. 176-190.

[18] *Cong. Rec.*, May 14, 1912, 6383, 6384; June 2, 1913, 1863, et seq.; Mar 10, 1914, 4631; Mar. 14, 1914, 4867; Jan. 27, 1915, 2148 et seq.

Criticisms of the Forest Service naturally involved a considerable criticism of Gifford Pinchot, for many years the head of the Service. He was accused of ruling over the reserves as a feudal lord over his demesne; and "Pinchotism," in the vernacular of certain congressmen, was meant to imply all that was arbitrary, unreasonable, and despotic. The fact that he was an eastern man, wealthy, and represented by some as an aristocrat, did not raise him in the estimation of some of the western people.[19] Representative Humphrey also criticised Pinchot for not having protested against the operation of the Forest Lieu Act, and several western men accused him of being in large measure responsible for the frauds arising under that act.[20]

HEYBURN'S CRITICISMS

It is perhaps hardly worth while to point out all the various criticisms made by Senator Heyburn in his opposition to the Forest Service: his assertion that the Forest Service was in politics; that forestry officials in Idaho had admitted they were instructed to see that he was not reëlected to the Senate; that forest rangers were accustomed to get their tree seeds by robbing squirrels' nests, thus leaving the squirrels to starve, etc. There may have been truth in some of his charges, but, as pointed out in a previous chapter, Senator Heyburn was so wholly lacking in judicial poise when he spoke of the Forest Service that his statements have to be received with considerable caution.[21]

Senator Heyburn was wont to tell a great many stories about the atrocities committed by the Forest Service. One story he several times recounted was that of Robert Byrne, a miner, who was shot from ambush for refusing to vacate ground from which he had been ordered by a forest ranger. Another story was of the mayor of Senator Heyburn's town, who, riding along the road with his family one day, met a forest ranger, but did not give him enough of the road, whereupon the ranger pulled a revolver and commenced shooting at him. These, Heyburn declared, were "merely little instances of the manner of administration.[22]

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[19] Something of the acerbity of some of the western writers may be judged from the following editorial from one of the western newspapers: "Of the asininity of Pinchotism, of the unfeeling selfishness with which mad theorists plan to build up a Federal empire in the sovereign states of the West and in Alaska, . . . Seattle long has had knowledge." (*Cong. Rec.*, Mar. 10, 1914, 4636.)

[20] *Cong. Rec.*, Jan. 7, 1910, 393-399; Mar. 10, 1914, 4636; Jan. 22, 1915, 2151, 2152; Apr. 18, 1916, 6390, 6395; Jan. 6, 1910, 366: *Forest Bul.* 67, 1905.

[21] *Cong. Rec.*, Mar. 8, 1910, 2885, 2893; Mar. 1, 1911, 3771, 3774.

THE REAL ATTITUDE OF THE WEST

Perhaps the question may be raised as to the real attitude of the West toward the national forests in recent years—Are the people in western states still generally hostile, or have they become reconciled to the reservation policy?

To this question it is difficult to give a general answer. Certainly the attitude of the people varies with the different states, counties, and communities, as well as with individuals. Much of the evidence on the subject is conflicting, anyhow. It is commonly asserted that the West has finally come to look with favor on the forests; yet, even in recent years, some western politicians have staked their political hopes on a record of hostility, and have won. Senators Heyburn and Dubois of Idaho always represented opposite sides of the question, and both seemed to feel assured of popular support. So, in later years, Humphrey and Bryan of Washington represented opposite views; and other similar examples might be given. Senator Warren attributed his defeat in one election to a speech he made in Congress in favor of ceding the forest reserves to the states. On the other hand, Congressman Taylor of Colorado once claimed that three representatives from Colorado had failed of reëlection because they failed to get some of the Colorado reserves opened to settlement.

Senator Smoot of Utah said not many years ago: "The approval of the work of this service on national forests by the great body of the people, and particularly by the western people whom it most affects, has grown steadily until it is probably more general and more emphatic than the popular approval of the work of any other Federal agency." Heyburn and Borah of Idaho would never for a minute have admitted any such statement as this; yet Mondell, a pretty consistent opponent of the forest reserves, stated recently: "The people in the Mountain States, in the main, believe that the reasonable establish-

[22] *Cong. Rec.*, Mar. 8, 1910, 2893: *Forestry and Irrigation*, Aug., 1908, 445. For a similar story told by Senator Carter, see *Cong. Rec.*, Feb. 26, 1909, 3233.

ment of reserves, that is, the establishment of reserves within reasonable boundaries, properly and wisely administered, is a good thing for that country and for the country as a whole."

One conservation writer concludes that Colorado is now friendly to the reserves, because the people of northern Colorado petitioned Congress for a law permitting the President to add a half million acres to one of the Colorado forests. Only three years before this, however, the legislature of Colorado had adopted a memorial to Congress strongly protesting against the reserves. It will be remembered that when the question of the disposition of the forfeited railroad grant in Oregon was up in Congress, certain representatives of Oregon expressed "unalterable opposition" to the creation of any more reserves.[23] It seems that the hostility which led to the withdrawal of the President's power in 1907 has not disappeared entirely, for in 1910, the section forbidding him to create national forests in the six northwestern states was reënacted, and in 1912, the state of California was added to the list.[24] In the fall of 1912, Gifford Pinchot sent out 2000 questionnaires to representative individuals in the western states, asking their opinion as to the value of the forests. Of the 1500 replies received, 90 per cent were claimed to be favorable to the reserves.[25]

Other illustrations might be given, but enough has been said to indicate that general statements are misleading, if not meaningless. It would probably be safe to say, however, that in general the people of the West are gradually abandoning their hostility to the national forests. Since 1910, following the Ballinger row and the dismissal of Pinchot from the Forest Service, Mr. Henry Graves was appointed chief forester, and his administration was far more acceptable to western people, for some reason. Even Senator Heyburn once expressed his belief in "the fairness and justice of the new régime.[26]

It might perhaps be worth noting that some states have generally been less hostile than others. Thus, Utah and California have been less hostile than Oregon, Washington, and Colorado, probably because irrigation is more important in the first-named states. The attitude of Utah men in Congress, Senator Smoot, for instance, has doubtless been influenced by the attitude of the Mormon Church; many of the Mormons are farming irrigated lands. The sentiment of the people of the West varies according to the occupation of the people. A grazing section usually presents a different attitude from a section peopled by small settlers, or miners, or "lumberjacks."[27]

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[23] *Am. Forestry*, July, 1917, 399: *Outlook*, May 3, 1913, 9.

[24] *Stat.* 36, 848; 37, 497.

[25] *Cong. Rec.*, June 17, 1913, 2066.

[26] *Cong. Rec.*, Mar. 8, 1910, 2894; Feb. 4, 1911, 1958.

SAFETY OF THE NATIONAL FORESTS

The question finally arises—Are the forests safe, or is there still a possibility that they may be turned over to the states, or opened to private exploitation? Prediction of the future is always dangerous, but many signs indicate that the reserves are probably safer than ever before. Even the radical opponents of the forest reserve policy have in recent years apparently realized the hopelessness of their fight. As early as 1910, Mondell declared in Congress: "Forestry and forest reserves have been a fad with the American people for a few years past and it does not seem to matter to them how much it costs. I realize that, and I have exposed myself to all sorts of criticism by being one of the very few people who have had something to say about the extravagance of the service. I have gone into it quite fully in other sessions of Congress. I realize it did not do a particle of good. . . . I realize that the committee proposes to give the Forest Service whatever it asks and without much question."[28] Senator Heyburn likewise seemed, at least occasionally, to realize that the sentiment in Congress was overwhelmingly against him. "Mr. President," he said at the close of a vigorous attack on the Forest Service in 1911, "I have very little hope of reformation in this hour. This is not the hour of reforms. It is the hour of chaos—political chaos, governmental chaos, and I will wait until conditions settle down and men begin to think."[29] Senator Heyburn's "hour of reforms" is probably more distant now than it was in 1911.

Various lines of reasoning would point to the probable indefinite retention of the national forests. The tendency of governmental policy is clearly away from the "*laissez-faire*" policy and toward government ownership and control at least of certain classes of lands. Furthermore, the trend is toward Federal control rather than state control. Also, it is being made clearer each year that the government made a serious mistake in alienating so much of its timber lands. The lumber industry for some time previous to the war had been in a very unsatisfactory condition, that is, private ownership had worked badly, even for those in the industry itself, while the threat of a future shortage of timber is always before the consumers. All this is being brought more and more clearly before the public through government and private investigations; and the purchase of timber lands under the Weeks Law indicates a purpose of seeking out a remedy, even at great expense. It would be very strange if the government, after going extensively into the purchase of denuded lands, should sell the timbered land it already has.

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[27] *Cong. Rec.*, Feb. 26, 1909, 3231, 3239; Feb. 1, 1910, 1340; Mar. 8, 1910, 2891, 2893; June 17, 1913, 2059, 2066; Apr. 18, 1916, 6406: *Proceedings*, Society of Am. Foresters, Nov., 1905, 70-76: *Outlook*, Nov. 7, 1908, 553; May 14, 1910, 57: *Report*, Montana Commission on Conservation, 1911.

[28] *Cong. Rec.*, Feb. 1, 1910, 1338.

[29] *Cong. Rec.*, Mar. 1, 1911, 3774.

While it hardly seems likely that the government will soon, or perhaps ever, abandon its great reserves, it should be noted that there are ways in which the reservation policy could be seriously perverted. It will be remembered that the attack on the forests in 1912 took the form of an attempt by the western states to get a larger portion of the proceeds. They now get 25 per cent—which for certain communities is doubtless too high—and have tried to get this raised to 50 per cent. Perhaps they will not be successful, but anything in the way of a "pork" grab has some chance of success in Congress, because those to be benefited are very zealous, and the rest of the members are likely to be less interested in defending the public treasury than in securing some "pork" of a different kind for their own constituents. If the share given to the western states should be raised to 50 per cent, or perhaps even higher, and the receipts were to increase greatly, as they certainly will in the future, the national forests might be a source of revenue to the West, while the country as a whole might still be holding the sack for the millions it has spent for permanent improvements in the forests, and for the cost of purchases under the Weeks Law. It is possible to imagine a situation in which the West, and perhaps those eastern states in which reserves were being bought up, would be vastly pleased with the reservation policy, while the rest of the country would turn to a position of actual hostility. A complete reversal of this kind seems unlikely, and yet a few scattered indications of such a change may perhaps already be observed. There will probably be a constant issue in Congress on the question of the percentage of forest reserve receipts which shall go to the western states, and this percentage may be fixed at such a point as to seriously affect the value of the reserves.

This represents only one of the possibilities in the future development of the reserves. Another possibility is that the Stock Raising Homestead Act of 1916, under which settlers and speculators may enter 640 acres of grazing lands, may some day be extended to the national forests.

There have always been some people who favored turning the national forests over to the states. Mr. James J. Hill has been one of the most influential champions of this policy, but in Congress, Senators Heyburn and Borah of Idaho, Fall of New Mexico, and Bailey of Texas, and Congressman Lafferty of Oregon have been actively favorable to such a disposition of the reserves. A considerable number of western men would probably vote for the proposition if it were presented in Congress. About 1912 or 1913, there were a great many efforts in Congress to effect this change. Even such consistent opponents of the reserves as Carter and Mondell, however, have been unwilling to go so far. Such a step at the present time would of course mean the abolition of most of the reserves, for most of the western states would not take care of reserves placed in their hands.[30]

On the whole, it seems that the national forests are reasonably safe. All the probabilities in the case point to a retention and even an extension of the reservation policy.

[30] *Cong. Rec.*, Feb. 26, 1909, 3230, 3231; May 14, 1912, 6390; May 15, 1912, 6477, 6478; May 16, 1912, 6561; Aug. 7, 1912, 10338; June 10, 1913, 1970: H. R. 2890; 62 Cong. 1 sess.: H. R. 1793; 63 Cong. 1 sess.: *Outlook*, Sept. 17, 1910, 90; Dec. 28, 1912, 935: *Scientific American*, Sept. 6, 1913, 176: *Report*, Oregon Conservation Commission, 1913.

CHAPTER X

THE WORK OF THE FOREST SERVICE

It is the purpose of this book to treat of the congressional forest policy, rather than the internal administration of the national forests or of other timber lands; nevertheless it seems appropriate to note briefly some of the developments in the administration of the national forests.

The work of the Forest Service has broadened greatly during the past decade or more, particularly since Gifford Pinchot assumed the office of chief forester in 1905; and at the present time the Service performs a great variety of important functions.

ADVICE AND ASSISTANCE TO PRIVATE OWNERS

In the first place, the Forest Service offers expert advice and assistance to private timber owners. As early as 1899, the appropriation bill recognized this as a legitimate function, and it has grown in importance. The advisory work of the Service may assume various forms. In a limited number of cases, it may take the form of advice and instruction regarding the practice of forestry, based upon examination of certain tracts. These examinations are restricted mainly to states not equipped to furnish expert advice, and usually they are made only when several examinations can be made on neighboring tracts, and on condition that the owners bear part of the expense.

In some cases, the advisory work of the Forest Service consists in referring owners to the proper state officer, especially in cases where woodlot examinations are desired, the state officer being presumably in closer touch with local conditions within his state, and able to make examinations at less expense than a Federal officer. Owners who desire to obtain planting stock, either seeds or young trees, with which to reforest waste lands, or establish farm woodlots or windbreaks, are supplied with lists of dealers in such stock.

In the development of this function of assisting private timber owners, three stages may be recognized. In the first stage, represented by the period preceding the transfer of the forest reserves to the Department of Agriculture, much attention was given to examinations of private lands and preparation of working plans. The increasing value of stumpage led many large timber owners to look with some favor upon plans for the best utilization of the timber; and the foresters rendered important assistance in two ways. In the first place, they showed many lumbermen that they could actually increase their profits by reducing the waste involved in cutting high stumps, in throwing away too much of the tops, and in failing to utilize more of the material left on the ground. Doubtless the lumbermen would in time have seen the loss involved in their methods of operation, but the change to more careful methods spread more rapidly as a result of the early coöperative work. In the second place, these early efforts of the foresters led to better methods of fire protection. This was done largely by educating the public up to a more intelligent understanding of the danger of fires, and the methods of preventing and suppressing them, and by stimulating the development of coöperative fire protection organizations.

During the second stage of this work, from the transfer of the reserves in 1905 until about 1915, the coöperative work was much less important, the Forest Service being engrossed in the preparation and publication of information needed for scientific forestry in the training of more expert foresters, and especially in working out the problems connected with the national forests. In the third stage, beginning about 1915, the Forest Service gave renewed attention to the problems of private forestry, particularly the problems of the small woodlot. Considerable attention has been given in these later years to the question of marketing. Also, with the development of a clearer appreciation of the public aspects of the lumber industry as a whole, more attention has been devoted to the problems of the large owners, from the point of view of the public interests. The Greeley report on "Some Public and Economic Aspects of the Lumber Industry," published in 1917, is an illustration of this point of view. Efficient and intelligent work along this line was made possible by the investigative work carried on during the preceding years.

This coöperation with private owners is a field of work which should broaden greatly in the future. The Forest Service must get into closer touch with the private timber owners if it is to accomplish the most possible; and the Service is making a vigorous effort to secure closer coöperation. Perhaps the Forest Service may sometime be given supervisory authority over private timber lands, coupled with the duty of assisting in fire protection, reforestation, and management; at any rate, the study of forest management in European countries indicates that some extension of the powers and duties of the Forest Service may be necessary if the forest interests of the country are to be adequately guarded. The different states will gradually extend the scope of their work in forestry, but the burden of this work must fall mainly on the Federal government.[1]

One of the principal means of assisting private owners is by the preparation and distribution of publications on forestry. These include "planting leaflets," which briefly describe the principal species adapted to the various parts of the United States, and methods of planting them; commercial tree bulletins, which deal with the characteristics of the more important commercial species; and a series of "regional studies," which discuss questions of forest management, planting, and utilization, with reference to the needs of private owners within regions where the conditions of forest growth and markets for wood products are comparatively uniform. Other publications dealing specifically with markets and uses of wood are issued from time to time.

Indicative of the sympathetic attitude of the Forest Service toward private interests, is the recent investigation of the lumber industry. This investigation by the Forest Service, unlike that made by the Bureau of Corporations a few years earlier (1907-1914), was conducted with a view to helping the lumber interests remedy the unfortunate conditions which had prevailed in the lumber industry for nearly a decade. The Bureau of Corporations had carried on its investigation with the apparent purpose of proving the existence of monopolistic conditions in the industry, no matter what the actual facts disclosed; while the Forest Service, in the first part of its report, published in 1917, disclosed a point of view which was clearly sympathetic and helpful.

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[1] See the annual reports of the Forester: *Forest Circ.* 21, 22, 27, 37, 79, 100, 138, 203: *Forest Bul.* 32, 39, 56, 68.

COÖPERATION WITH STATES

The Forest Service has developed a policy of assisting not only private owners, but states as well, through coöperative agreements. Under such agreements, the Forest Service has made a great many studies, dealing with various problems related to forestry. Thus, in 1908, a study of forest taxation was undertaken in New Hampshire and a comprehensive law was drafted and presented to the Legislature. In 1910, a study was undertaken in coöperation with the Pennsylvania Department of Forestry to ascertain how far soil erosion and floods in certain districts of Pennsylvania are due to forest destruction along the watersheds. In all cases, states are required to share in the expense of studies of this nature.[2]

The most important work done in coöperation with states has been that of fire protection. One of the sections of the Weeks Law appropriated the sum of $200,000 for coöperation with the states in protecting the forested watersheds of navigable streams from fire. Such coöperation has been extended only to states which have provided by law for fire protection, and have appropriated for that purpose funds at least equal to those provided by the Federal government. The states have responded very liberally to this offer of assistance, and in 1916 a total Federal expenditure of $90,000 was "supplemented" by over $400,000 of state funds, from twenty-two different states.[3]

PROTECTION OF FISH AND GAME

Another function of the Forest Service which has developed considerably in the last few years, and is destined to develop much further, is that of protection of fish and game. As early as 1906, the appropriation bill had included the "protection of fish and game" among the proper functions of the Forest Service, and since then considerable sums of money have been given each year for the conservation of various forms of wild life—not only fish and game, but also birds. Doubtless this movement was to some extent due to the influence of President Roosevelt. Game refuges in the national forests can be created only by special act of Congress, and only three have been created—the Wichita Game Preserve in Oklahoma, the Grand Cañon Game Preserve in Arizona, and the Pisgah Game Preserve in North Carolina. In 1918, the Wichita preserve contained a herd of 100 buffalo, with some elk, antelope, deer, and smaller game; the Grand Cañon preserve supported 6000 to 8000 deer and other game; while the Pisgah preserve sheltered deer, wild turkey, and wild fowl. The five big game preserves in which most of the wild game is to be found are not in charge of the Forest Service, but are under the jurisdiction of the Biological Survey.

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[2] See annual reports of the Forester.

[3] See annual reports of the Forester, particularly that of 1916, p. 179: *Forest Circ.* 205: *Stat.* 37, 855. On general forest fire prevention see *Forestry and Irrigation,* Jan., 1907, 23; Feb., 1907, 62: *Am. Forestry,* Nov., 1910, 681; Dec., 1910, 744; May, 1912, 349; Aug., 1912, 541; Nov., 1913, 739: *Conservation,* Feb., 1909, 70, 71.

Many of the national forests carry considerable game, however. Of the 40,000 elk in the Yellowstone region, about half live in the national forests surrounding the park, and a portion of the remainder occupy national forest land at times. There are 3000 or more elk in the Olympic Forest, and smaller herds in the forests of central and western Montana and central Idaho, and new herds are being built up in various national forests of Colorado, New Mexico, and Arizona.

In spite of all efforts, national forests at present carry only an insignificant fraction of the game which could be supported upon them; in fact, in many sections the game has been almost entirely exterminated. The individual states have jurisdiction over the game, the Forest Service merely coöperating with the states in carrying out the state laws for protection; and this division of responsibility has not worked for efficiency. The Federal government has full authority to protect game in only seven of the sixteen national parks—the Yellowstone, Glacier, Mount Ranier, Crater Lake, Platte, Hot Springs, and the Hawaiian. The states have not ceded jurisdiction of the other nine parks, and, in the absence of Federal legislation, the Federal authorities can punish poachers there only by expelling them from the park limits. Of the thirty-four national "monuments," twenty-one are administered by the National Park Service, eleven by the Forest Service, and two are under the jurisdiction of the War Department, while the game on them remains subject to state jurisdiction.

A good example of the confusion in jurisdiction is found in the administration of the great elk herds in the region of Yellowstone Park. In the park itself, game is wholly under Federal jurisdiction, but in the adjoining national forests game is under state jurisdiction. Within a relatively small area it would be possible to find as many as four different sets of game laws, and of course the elk frequently wander across state lines and into new jurisdictions. The states do little to care for these elk, and in severe winters hundreds of them died of starvation, before the Federal government established a feeding station at Jackson Hole, where they are now fed in severe weather.

There is need of a more comprehensive plan. Perhaps all game in the national forests should be placed under the jurisdiction of the Forest Service, with provision for proper state coöperation. Perhaps the entire jurisdiction over the national parks should be placed with the Forest Service, in the Department of Agriculture, instead of in the Department of the Interior. The Park Service needs men of much the same character as the Forest Service; many of the problems are similar; and some economy, and perhaps also efficiency, would be secured by turning the national parks and the national forests over to the same administrative department—the Forest Service.[4]

The game in Alaska has received considerable attention in recent years. Alaska was once one of the finest hunting grounds in the world, but in recent years the moose, caribou, white mountain sheep, and other game animals have decreased very greatly in numbers; and with the building of the new railroad into the interior, some species of game seem on the way to extinction. A law was passed in 1908 providing extensive regulations for their protection, and authorizing the appointment of a game warden to enforce these regulations. Considerable sums have been voted from time to time to carry out the provisions of this law; but the enforcement has not been very effective. The recent creation of the Mount McKinley National Park as a game preserve will provide protection for some of the Alaskan game.

Probably the development of the game resources of the national forests and of the country generally will receive greater attention in the future. The number of bills introduced in Congress to establish "game sanctuaries" indicates a growing public interest in the matter.[5]

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[4] *Am. Forestry*, Mar., 1917, 133, 139; Jan., 1917, 48, 49.

RECREATIONAL USES OF THE FORESTS

The development of the recreational uses of the national forests is also receiving increasing attention. To an increasing extent the forests are being used as playgrounds for the people of the country. It is said that nearly seven hundred thousand people visited the national forests of Colorado in the summer of 1916, left the sweltering heat of the prairie states and the states farther east, for a vacation in the mountains. The Forest Service is trying in various ways to increase the usefulness of the national forests to those seeking recreation.

In 1915, a law was passed authorizing the Secretary of Agriculture to grant permits for summer homes, hotels, and for similar uses in the national forests for periods of not more than thirty years; and under this law a great many permits have already been issued. Through the issue of permits in this way, the Forest Service is able to prevent any class of individuals from permanently appropriating the most beautiful lake and mountain sites. Wholesale appropriation of beautiful mountain regions, as for instance in the case of the Dunraven estate in what is now Estes Park, is not possible in the national forests.[6]

ASSISTANCE TO GRAZING INTERESTS

The problems of grazing and of range management are still important. The ranges of the national forests cover about 100,000,000 acres of land, on which a total of about 15,000,000 animals, including 5,000,000 young, are grazed each year. In addition, there are several million head of stock which spend from one to forty days in the forests while crossing to private lands, and several hundred thousand more are grazed by settlers and campers under free permits. A total of over 33,000 permittees are using the ranges in the national forests.

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[5] *Reports*, Sec. of Agr., 1909, 396; 1910, 404; 1911, 398; 1912, 525; 1916, 172: *Report*, Forester, 1914, 23: *Report*, Sec. of Int., 1916, Vol. I, 237: *Report*, Chief of the Bureau of Biological Survey, 1917: *Proceedings*, National Park Conference, Washington, 1917, 187, 200, 206: *Am. Forestry*, Mar., 1917, 139: *Stat.* 33, 614; 34, 536, 607; 35, 102, 1104, 1137; 36, 1258; 37, 292, 459, 847; 38, 49, 434, 648, 862, 1105; 39, 233, 467, 476: H. R. 6881, 11712, 14972, 17381; S. 3044, 4418; 64 Cong. 1 sess.

[6] *Stat.* 38, 1101: Forest Service, Use Book, 1915, 136: *Report*, Sec. of Agr., 1916, 176: *Am. Forestry*, Mar., 1917, 133; June, 1917, 358: *Outing*, May, 1916, 172.

The Forest Service is working out more effective means of coöperation with the stockmen, through a recognition of the various livestock associations, of which there were 359 in 1917. These associations may adopt and request the enforcement of special rules designed to secure better conditions for the stock on the range, and such special rules, when approved by the district forester, are enforced by the Forest Service and are binding upon all permittees using the range. Thus the Forest Service endeavors to coöperate with the stockmen in securing the fullest utilization of the range; and the attitude of the stockmen is more helpful and friendly as a consequence.

Free range privileges are given in an increasing number of cases. In some portions of the forests, notably in the Sierra Nevada of California, the demand for range accommodations for animals belonging to campers and tourists has become so great that it is necessary to set aside considerable areas for their use. The amount of grazing land required by settlers is increasing with the increase in the number of homesteaders in and adjacent to the forests, each settler being permitted to graze ten head of milch, work, or saddle animals free of charge. Large numbers of livestock belonging to the Indians residing in or adjacent to national forests are also grazed free.

Efforts are being made to increase the value of the range in still other ways. For several years the Forest Service has tried to work out effective means of destroying predatory animals. Men were even employed to hunt and trap, and forest officers were urged to help where possible, by hunting and trapping, and by using poison. In 1916, this work was turned over to the Biological Survey, but even after that, the Biological Survey furnished some forest officers with traps, ammunition, and poison. The Biological Survey had previously carried on the work of destroying prairie dogs, ground squirrels, and other range-destroying rodents.[7]

[7] *Forest Bul. 72, 97.*

The Forest Service, in coöperation with other branches of the government, has been trying to reduce stock losses from disease and poisonous plants. This work has been largely experimental in its nature, but it is claimed that stock losses have been materially reduced.

The question of grazing in the new national forest areas of the Appalachian region has recently come up for consideration, and in 1916, these areas were placed under regulations very similar to those enforced in the West.

One great problem still awaits solution, and that is the problem of preventing the too frequent loss of animals on the public range from starvation and exposure. Under a system which is a disgrace to civilization, stockmen regularly turn animals out on the range without any provision for feeding them in case of an unusually unfavorable season; and in severe winters many animals always starve to death on the plains. Thus the winter of 1908-1909 was very severe, and the result was "considerable losses of newly sheared sheep." The following winter "prolonged periods of extremely cold weather caused suffering among all classes of stock; winter losses were *above the average,* and the percentage of increase among sheep and cattle was materially reduced." The winter of 1911-1912 was severe, and government officials reported that "there was a pronounced shortage of winter feed, and heavy losses of stock occurred in Colorado, Wyoming, and southeastern Montana." In some sections of Arizona, 20 per cent of the ewes were reported to have died. The winter of 1915-1916 brought a similar condition, and travelers in the West in the spring of 1917 noted the carcasses of cattle scattered along the plains. Conditions have been better on the ranges within the national forests, and the Forest Service has made special efforts to assist the stockmen who were unable to provide their herds with feed; but the conditions which recur with every hard winter demand a more effective remedy.[8]

INVESTIGATIVE WORK

The Forest Service has developed many kinds of investigative work. In the first place, it has carried on research work in range con-

[8] See the annual reports of the Forester.

ditions. In 1910, the government appropriated several thousand dollars for experiments and investigation of range conditions within the national forests, and of methods of improving the range by reseeding, regulation of grazing, etc.; and the work has been maintained ever since, $25,000 to $30,000 being appropriated annually the past few years. These experiments relate to the more careful determination of the grazing capacity of the ranges, the proper distribution of watering places in order to secure maximum efficiency of the range, the effect of grazing on various trees and on fire danger, the proper protection of land subject to erosion and floods, and the possibility of reseeding ranges where the vegetation has once been destroyed. There have also been some studies of poisonous plants, and some in the construction of coyote-proof pastures, especially for lambing.[9]

The main investigative work of the Forest Service, however, relates not to range lands, but to forest lands proper, and this work has in recent years expanded to cover a great variety of subjects, included under three general heads—dendrology, silviculture, and forest products.

Dendrological studies, or studies concerning the distinguishing characters and the geographic distribution of the different species of North American trees and shrubs, were specifically provided for in the appropriations of 1910, and every year since, a considerable amount has been given for this purpose. These studies are carried on by the dendrologist and his assistants at Washington, with such help from the national forest officers as they may be able to give.

SILVICULTURAL INVESTIGATIONS

Silvicultural investigations cover a great variety of important studies, relating to forestation, forest influences, management of forests, forest mensuration, and forest protection. Some of these studies have been carried on for a great many years, but the work received a great stimulus in 1908, with the establishment of the experiment station at Flagstaff, Arizona. Since that time six other experiment stations have been established, two in Colorado, and one each in Idaho, Minnesota, Utah, and California. There is also a seed-testing laboratory at the Arlington Farm, Washington, D. C.

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[9] *Reports,* Sec. of Agr., 1910, 402; 1911, 397; 1912, 524; 1916, 183: *Report,* Forester, 1915, 31: *Forest Circ.* 156, 158, 160, 169: *Forest Bul.* 97.

FORESTATION

The work in forestation is an important line of silviculture. This includes experiment in *reforestation* of cut-over lands, and in the forestation of lands which have never grown trees. The work covers the entire field of establishing a forest by artificial means—from the collection of the seed to the final sowing of seed or planting of trees. It includes investigations in regard to the collection and testing of seed; factors influencing the amount and quality of seed produced, such as site and condition of the tree; periodicity of seed years; effect of the source of seed, such as the locality in which the seed was produced and the condition of the mother tree upon the size and hardiness of the seedlings. It covers studies in the nursery relating to the time of sowing, depth of covering, necessity of shade, protection from birds and rodents, age of transplanting, methods of transplanting, use of fertilizers for the various species; also experiments in seed sowing and planting of nursery- and forest-grown stock, to determine the comparative values of each for the various species and sites, as well as the best seasons, the best age of stock, the possibility of extending the range of native species, or of introducing exotics.[10]

Probably reforestation will get increasing attention in the future. There are millions of acres of natural forest lands, divested of timber but unfit for agriculture; and, with the rapid exploitation of our remaining timber lands, this area will increase. In most regions forests which are cut reproduce themselves without any assistance other than protection from fire, but in some regions and under some circumstances artificial restocking is necessary. Whether mere protection or artificial replanting is necessary, the work must be done mainly by the Federal government. As lumber prices advance, an added stimulus will be given to such work, and, when prices have reached something like the European level, perhaps reforestation will be as important as it now is in some European countries.[11]

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[10] Review of Forest Service Investigations, Forest Service, 1913: *Forest Bul.* 98: *Agriculture Bul.* 475. See also annual reports of Forester, 1908 to 1916.

[11] *Report,* Sec. of Agr., 1908, 424; 1909, 388; 1910, 386; 1911, 372; 1912, 505; 1916, 166: *Report,* Forester, 1914, 15.

The experiments in tree planting on lands which have not grown trees seem somewhat like a revival of the old Timber Culture Act of 1873, and some of the results are apparently about as encouraging as the results of the earlier act. As early as 1899, the appropriation bill provided for seeking "suitable trees for the treeless plains," and two of the national forests—one in Kansas, and one in Nebraska—were created especially for working out this problem; but very recently (1916), the Kansas National Forest has been abolished. This indicates that the results accruing from the work there were not satisfactory, although some valuable information was acquired regarding the adaptability of various species to the arid climate. In the Nebraska National Forests, the Forest Service is still at work on the problem of finding some kind of forest cover which will hold down the sand hills of western Nebraska, and some success has been reported. The appropriation bill of 1911 provided for the free distribution of trees from this forest to settlers within the "Kinkaid" district, and hundreds of thousands of trees have been given away.[12]

INVESTIGATION OF FOREST INFLUENCES

It was pointed out in a previous chapter that in the early period much attention was given to the question of the influence of forests on climate, and the Forest Service is conducting experiments with a view to determining more exactly the relation of forests to climate and streamflow.

The study of the effect of forest cover on streamflow is carried on at the Wagon Wheel Gap Station, in Colorado. The object is to determine, by means of the most careful and accurate measurements, the effect of forest cover upon the high and low water stages of mountain streams, the total run-off from mountain watersheds as compared with the annual precipitation, and the erosion of the surface of such watersheds. Measurements of the streams in two watersheds, both moderately well covered with forests, will be conducted for a number of years, with the measurements of all the factors which may affect the character of the flow of each stream. There has been no general agreement among writers as to the exact influence of forests on climate and streamflow, and it is to be hoped that these investigations will furnish the basis for the settlement of some long mooted questions.[13]

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[12] *Forest Bul.* 66, 121: *Forest Circ.* 37, 99, 145, 161: *Report,* Sec. of Agr., 1912, 511; 1916, 160, 168: *Report,* Forester, 1914, 16, 18: *Report,* Chief of Div. of Forestry, 1891, 206: *Proceedings,* Society of Am. Foresters, July, 1914, 365, 388: *Canadian Forestry Journal,* Oct., 1905, 155: *Proceedings,* Am. Forestry Assoc., 1890, 81.

OTHER SILVICULTURAL INVESTIGATIONS

Among other silvicultural studies of the Forest Service are those relating to forest mensuration, that is, studies as to the growth, volume, and yield of the different species and types of forests; protection studies, aiming to ascertain the exact effect of fire, grazing, diseases, insects, animals, snow, hail, and wind; regional studies, to secure authentic information concerning the forest resources of state or forest regions; silvical studies, which try to establish a definite relation between the forest region, forest types, and forest trees in general, and the climatic and physical factors affecting their distribution and growth; and also some field studies in utilization of timber.

INVESTIGATIONS IN FOREST PRODUCTS

A field of investigation which is expanding tremendously in recent years is that relating to forest products. The work is mainly directed from headquarters in the Forest Products Laboratory at Madison, Wisconsin. This laboratory, which is maintained in coöperation with the University of Wisconsin, is one of the best of its kind in the world. Laboratories are also maintained at Wausau, Wisconsin, and at Seattle, Washington, and district stations have been established at several points. Studies in this field fall under four heads—mechanical and physical properties and structure of wood, wood preservation, derived products, and statistical studies.

The first class of studies includes those relating to strength of structural timbers; stiffness, toughness, hardness, specific gravity, and other qualities of different woods, effect of air seasoning, kiln-drying, and high temperature and pressure treatments.

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[13] Review of Forest Service Investigations, 1913, 36: *Forest Bul.* 44, 91: *Forest Circ.* 143: House Committee on Agriculture, "Report on the Influence of Forests on Climate and Floods," by Willis L. Moore, 1910: *Yale Review*, 10, 241: *Review of Reviews*, 47, 605: *Proceedings*, Am. Forestry Assoc., Sept., 1897, 133: *Agr. Yearbook*, 1903, 279: *Science*, July 18, 1913, 63-75.

In connection with the studies in wood preservation, experiments are conducted in the protection of wood from destruction by decay, fire abrasion, and insects; the cost and efficiency of preservatives, various processes of preservation, and the suitability of different species to preservation. This includes experiments in the preservation of wood blocks for paving, carried on in coöperation with various cities; experiments in the preservation of railroad ties and telephone poles, carried on in coöperation with railroad companies, and telephone and telegraph companies; experiments in the preservation of mine timbers, carried on in coöperation with mining companies; tests in the prevention of wood decay in cotton factories, where conditions are very favorable to decay, carried on in coöperation with factory owners and insurance companies; experiments in devising a preservative for wooden ships against marine borers; tests in the methods of preserving fence posts and silo timbers from decay; a great number and variety of tests and experiments vitally related to the commercial interests of the country.

Experiments in the kiln-drying of lumber have been carried on for some time, and it is claimed that these experiments have resulted in much more economical drying of some woods. In the drying of red gum, for instance, one of the most difficult and refractory woods to dry, it is claimed that commercial losses have been reduced from 15 per cent to less than 1 per cent. So in the drying of maple shoe lasts, the period required has been reduced from nearly two years to seven weeks. A method was perfected recently whereby hemlock ship lap was dried in forty to forty-eight hours, two-inch planks in four to six days. Some interesting experiments in kiln-drying have been carried on in coöperation with furniture companies, woodenware manufacturers, lumber manufacturers and railroads.

Studies of derived products cover a vastly increasing field, including investigations in the manufacture of pulp and paper, to ascertain the fitness of various woods for paper making, the process appropriate to different woods, the possibility of using waste barks for the manufacture of pulp and paper products, the latter investigations being carried on in coöperation with paper companies. In this class of investigations are included also those relating to wood distillation—the extraction of acetate of lime, wood alcohol, rosin, turpentine, and various miscellaneous products. Recent experiments in the production of ethyl alcohol from wood waste have resulted in great economies. Methods of producing naval stores devised by the laboratory are reported to have increased the yield 30 per cent. Nearly a million dollars' worth of dye is now manufactured annually from Osage-orange wood—an industry built up as a result of investigations carried on in the laboratory at Madison.

Statistical studies have been made from time to time covering the amounts, prices, sources, and uses of various forest products. Such studies are of course of an economic nature, but are necessary to the development of an intelligent forest policy.

FOREST PRODUCTS RESEARCH AND THE WAR

The entry of the United States into the war in 1917 brought out clearly the importance of the forest products investigations. Much of the technical information that had been secured in this research work was immediately important in the solution of war problems, which demanded exact knowledge of the properties of wood, and the mechanical, physical, and chemical methods of conditioning. In the construction of airplanes, for instance, there was a demand for knowledge of the qualities of different woods, the availability of substitutes for the spruce commonly used, methods of drying woods speedily, the strength of laminated structures and veneers and plywood—a multitude of problems of great importance in the prosecution of the war. The Forest Products Laboratory had a large amount of data on the properties of airplane woods at the beginning of the war, but much more was needed immediately, and soon the war aircraft problems occupied the attention of about two thirds of the force at the Madison laboratory.

At the beginning of the war, it was customary to air-dry all wood used in airplane construction, because of the danger of reducing the strength by methods employed in commercial kiln-drying. It takes about two years to air-dry spruce for this purpose, and large quantities of material were needed at once, so kiln-drying was absolutely necessary. Investigations in kiln-drying had been under way at Madison for several years, and methods had been worked out for a number of woods. Similar experiments with spruce showed that it could be kiln-dried without loss of strength in less than a month; and numerous dry-kilns constructed on the plan laid down at Madison were built by the companies with airplane contracts.

Plywood formed by gluing together several sheets of veneer was found to be very serviceable for various parts of airplanes. A plywood wing rib has been developed which weighs nearly one third less than the rib before used, while its strength is 200 per cent greater.

These are only a few illustrations of the work being done in forest products. Probably this work will expand in the future, as the increasing scarcity of timber compels a more intelligent and economical use of our remaining resources.[14]

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[14] Review of Forest Service Investigations, 1913. See also the annual reports of the Forester and numerous bulletins issued by the Forest Service.

CHAPTER XI

RESULTS OF OUR FOREST POLICY: CONCENTRATION IN THE OWNERSHIP OF STANDING TIMBER

The unfortunate results flowing from our unwise forest policy have been pointed out in various connections throughout the preceding chapters; but it will be appropriate at this point to consider these results in somewhat greater detail. They may be briefly summarized as follows: In the first place, almost all the standing timber of the country has gravitated into the hands of a relatively few holders; in the second place, on the basis of this concentration of ownership of timber, a certain unity of control has developed in the lumber industry, which, though of no very serious importance in the past, may hold a threat of future difficulty; in the third place, private ownership of standing timber has proved unfortunate, even for the lumbermen themselves. Carrying charges on standing timber have been so heavy in some instances as to force cutting regardless of price, and the consequent demoralization of the market has meant that many producers must sell below actual cost of production. In the fourth place, lumbering in the United States has always been characterized by extravagant wastes; and in the fifth place, few lumbermen have made any effort to reforest cut-over lands.

During the past forty years or more, various government officials and others have pointed out repeatedly that the timber lands were going rapidly into the hands of a few timbermen and speculators. Most thoughtful students of the question have realized that such a process was going on; but the full extent to which the concentration of ownership had proceeded was not clearly understood until recently. In 1913, the Bureau of Corporations, after several years of investigation of the most important timber regions in the country, published the first part of its "Report on the Lumber Industry"; and this report brought the situation clearly before the public.[1]

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[1] H. Res. 652, S. Res. 189; *Cong. Rec.*, Dec. 13, 1906, 352; Jan. 18, 1907, 1330-

CONCENTRATION OF OWNERSHIP IN TERMS OF BOARD FEET

The privately owned timber of the United States, according to the best estimates, amounts to some 2,197,000,000,000 feet. Of this total amount about four fifths was included in the area investigated by the Bureau of Corporations; and of the amount in the investigation area nearly half was owned by holders of 1,000,000,000 feet each or over; 39 per cent was owned by holders of 2,000,000,000 feet or over; 32.2 per cent by holders of 3,500,000,000 feet or over; 26 per cent by holders of 5,000,000,000 feet or over; and 19 per cent—nearly one fifth—by holders of 13,000,000,000 feet or over. Over 69 per cent of the unreserved timber in the investigation area was owned by holders of 60,000,000 feet or over. To illustrate the magnitude of some of these figures, it may be stated that a billion feet of lumber would load a freight train 417 miles long, or would build about 65,000 ordinary five- or six-room houses.

The three largest holders in the country owned in 1914 over 237,-

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1332. Owing to the fact that most of the material on the subject of concentration of ownership of standing timber is taken from the Report of the Commissioner of Corporations on the Lumber Industry, few citations to references are here given. The first three parts of the report are provided with excellent and detailed indexes, and anyone wishing to follow up information contained in this chapter can easily find the source by referring to them.

Certain considerations unfortunately render the information contained in the Report on the Lumber Industry somewhat less accurate than the writer could wish. In the first place, the report was published several years ago (1913 and 1914), and some of the details of ownership have certainly changed since then. One change that should be noted at the outset, is that, since the report was published, the Southern Pacific has lost about 2,000,000 acres of its most valuable timber land, through the forfeiture act of 1916. Many smaller changes might be mentioned. Thus the Gould estate is reported to have sold its holding of about 100,000 acres in Louisiana; and many such changes in ownership are constantly being made.

In the second place, the Report on the Lumber Industry was written with a too evident purpose of proving the existence of something approaching a monopoly condition in the timber and lumber industry; and, as a result, some of the conclusions drawn are hardly justified by the evidence at hand.

In spite of all this, it has seemed wise to include some of the material relating to the subject of timber ownership. Such changes in the details as are constantly occurring do not affect seriously the general situation as presented in this chapter, and the inclusion of some such details give definiteness and concreteness to the general statements. Also, while some of the conclusions drawn in the Report on the Lumber Industry are not justified, the data and statistics presented are for the most part fairly accurate—the best, and indeed almost the only data available on the subject. Some material which was too clearly forced and biased, the writer has been careful not to include here.

000,000,000 feet—nearly 11 per cent of all the privately owned timber; and the eight largest holders owned 340,000,000,000 feet, or 15.4 per cent—over three times the entire amount of stumpage in the Lake states. The Bureau of Corporations constructed ownership maps for certain areas in the Pacific states, in Idaho, and in Louisiana, and it appeared that of the 755,000,000,000 feet contained in these map areas, 552,000,000,000 feet—nearly three fourths—was owned by 198 holders.

ACREAGE FIGURES

Concentration of ownership in terms of board feet is sufficiently marked, but perhaps nearly as significant are the figures in terms of acreage. The three largest timber holdings in the United States—those of the Southern Pacific, the Weyerhaeuser Timber Company, and the Northern Pacific—aggregated about 9,000,000 acres of timber land—since the forfeiture of the Southern Pacific lands in Oregon, only about 7,000,000 acres—some of it among the finest in the world. The five largest holdings in the country included 12,794,000 acres, an average of 2,560,000 acres each. Among holdings smaller than these were 9 of from 500,000 to 1,500,000 acres, averaging almost 1,000,000 acres each; 27 holdings of from 300,000 to 500,000 acres each; 48 holdings of from 150,000 to 300,000 acres; 124 of from 75,000 to 150,000 acres; and 520 holdings of between 18,000 and 75,000 acres. Thus 733 holders owned in fee a total of 71,521,000 acres of timber land and land owned in connection with or in the vicinity of this timber land—an average of nearly 100,000 acres each. There were also 961 smaller holders owning a total of 6,731,000 acres, an average for each of 7,000 acres—the equivalent of forty homesteads. This makes a total of over 78,000,000 acres owned in fee by 1,694 holders—nearly one twentieth of the land area of the United States, from the Canadian to the Mexican border.

It may be noted that even within the national forests, private parties owned much of the valuable timber land. In the national forests of California, Oregon, Washington, Idaho, and Montana, they had nearly 15,000,000 acres. In some of these reserves as much as 30 or 40, or even 62 per cent of the land was privately owned; and of course the privately owned land was the best.

CONCENTRATION OF OWNERSHIP IN THE NORTHWEST

Of the three great regions investigated—the Pacific Northwest, the southern pine region, and the Lake states—the Pacific Northwest, including California, Oregon, Washington, Idaho, and Montana, contains by far the greatest amount of timber; contains, in fact, over half of the timber in the United States—over twice as much as the southern pine region and over ten times as much as the Lake states.[2] It is mainly from this region that the future supply of timber for the United States must come, and it is in this region that the greatest timber holdings in the United States were found. The three great holdings of the Southern Pacific, the Northern Pacific, and the Weyerhaeuser Timber Company included in 1914 over 237,000,000,000 feet of lumber, more than double the total stand of the three Lake states. Thirty-eight holders, each owning 3,500,000,000 feet or over, owned over half of the privately owned timber in this region, while holders of 60,000,000 feet or over owned 93 per cent of the redwood, and 79 per cent of the other species.

In the great timbered area of southwestern Washington, one holder—the Weyerhaeuser Timber Company—held the title to 42 per cent of the timber. The Weyerhaeuser Timber Company and the Northern Pacific Railroad together owned about half; and the thirty-

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[2] According to estimates the total standing timber of some of the important lumber producing states is as follows (in billions of board feet):

	PRIVATELY OWNED	TOTAL
Pacific Northwest:		
Oregon	398.1	545.8
Washington	294.6	391.0
California	248.1	381.4
Idaho	50.4	129.1
Montana	21.8	65.6
Southern Pine Region:		
Louisiana	119.8	
Mississippi	95.3	
Arkansas	78.7	
Florida	73.9	(Almost all of the timber in the southern pine region and in the Lake states is privately owned, so no totals are given.)
Texas	66.0	
Alabama	56.3	
Lake States:		
Michigan	47.6	
Wisconsin	29.2	
Minnesota	23.2	

five largest holders owned 73 per cent. The holdings of the Weyerhaeuser Timber Company, the Northern Pacific, and three others contained 43.4 per cent of all the privately owned timber in the state of Washington—the second greatest timber state in the Union.

The situation in western Oregon has so greatly changed with the forfeiture of the Southern Pacific lands in this section in 1916, that the figures of the Bureau of Corporations are no longer accurate. Besides the Southern Pacific, however, there have been several important holders here. The Weyerhaeuser Timber Company itself owned, in 1914, 380,599 acres in Oregon, largely acquired from the Northern Pacific Railroad Company by the purchase of lieu selections. C. A. Smith owned about 250,000 acres here; the Booth-Kelly Lumber Company, closely affiliated with the Weyerhaeusers, about 324,000 acres; and several other lumber companies owned large tracts.

In the sugar pine and western pine forests of northeastern California, the Southern Pacific was the dominating holder. In this region was also, however, the immensely valuable holding of Thomas B. Walker, the largest individual (non-corporate) timber owner in the country, amounting to over 750,000 acres. The Southern Pacific Railroad and Thomas B. Walker together controlled half of the private timber in this area, and these two, with four other holders, owned 70 per cent.

In the redwood lands of the north California coast, the stand of timber is exceedingly heavy, running often from 100,000 to 150,000 feet per acre and sometimes even as high as 1,000,000 feet, so that, in the territory covered by four counties, there is nearly as much timber as in the entire three Lake states; and here was found an unusually high concentration in timber ownership. Forty-one per cent of the total redwood in this district was owned by six holders. The twenty-three largest holders owned 79 per cent of the timber, and among these holders there was interrelation, through common stock ownership and common directorships. In no other species of timber did the holders of 60,000,000 feet or over own as large a percentage of the total amount of the species. Even in cypress, where ownership is highly concentrated, such owners had only 72 per cent of all, and in white and Norway pine, 80 per cent; while in redwood they had 93 per cent.

The unusually high degree of concentration of ownership shown here was the result of the grossest frauds under the public land laws, since in this region there was no great Federal land grant such as tended to increase concentration of ownership in northeastern California, western Oregon, and southwestern Washington.

In the white pine and western pine region of north central Idaho, almost all of the timber was found to be in the hands of a very few large holders. Seventy per cent of the unreserved timber was owned by seven holders—in fact, the Idaho white pine belt was so largely in the hands of these seven holders, that an outsider would have found it difficult to assemble a holding of as much as a quarter of a billion feet against their opposition. This is especially significant in view of the fact that three of these seven holders were interrelated by minority interests. Over half of the unreserved timber was in the hands of three holders—the Potlatch Lumber Company, the Clearwater Timber Company, and the Milwaukee Land Company. The first two mentioned were at least in some measure controlled by the Weyerhaeuser interests, and the Milwaukee Land Company was owned by the Chicago, Milwaukee & St. Paul Railway Company. The interests controlling the situation in north central Idaho were also closely connected with important interests in the southern part of the state.

Two holders, the Northern Pacific and the Amalgamated Copper Company, together with four relatively small holders, owned 79.3 per cent of the non-reserved timber in Montana. The total area investigated in this state was about 3,000,000 acres, and the Northern Pacific and the Amalgamated Copper each had over a million acres of this, the Amalgamated Copper having secured its holding by purchase from the Northern Pacific, which originally owned almost all. Smaller holders played a very unimportant part in this region.

THE THREE BIG HOLDINGS OF THE NORTHWEST

The three greatest holdings in the Pacific Northwest, or indeed in the United States—those of the Southern Pacific, the Weyerhaeuser Timber Company, and the Northern Pacific—merit a little further consideration. The total acreage of timber land owned by these three corporations in 1914 was over 9,000,000 acres; of which the Southern Pacific had over 4,500,000 acres, the Weyerhaeuser Timber Company about 2,000,000 acres, and the Northern Pacific over 3,000,000 acres.

Stumpage figures for these three great holdings are more significant than acreage figures, because the average stand of timber is far heavier in the Pacific Northwest than in the Lake states or in the South.[3] The total stumpage owned by these three holders amounted to over 237,000,000,000 feet—11 per cent of all the non-reserved timber in the United States, and nearly 25 per cent of the privately owned timber in the entire Pacific Northwest, where over half of the country's timber supply stands. This was more than double the entire timber supply of the Lake states, over three times the total stand of Florida or Texas or Alabama.

The Southern Pacific Railroad, with over 105,000,000,000 feet of timber, standing on 4,500,000 acres of land, was the largest timber owner in the United States, before the forfeiture of its Oregon holdings. This one corporation owned more timber than is found in the three Lake states, or in any state in the South, except Louisiana; but in 1916, Congress forfeited over half of this, so that its present holding is less than that of the Weyerhaeuser Timber Company, or perhaps even the Northern Pacific.

The Weyerhaeuser Timber Company owned about 2,000,000 acres, the main bulk of which was in Washington, though the company had also 380,000 acres in Oregon, and smaller tracts in Idaho and in the Lake states. This did not include further interests of the Weyerhaeuser family and their associates. Perhaps it should be stated also that the Weyerhaeuser Timber Company had apparently some friendly relation at least with the Northern Pacific, and some connection with various timber companies in the Pacific Northwest and elsewhere.

While the Northern Pacific owned a much larger acreage than the Weyerhaeuser Timber Company, the quality of its lands was relatively so much poorer that its total stumpage was less than half as great—about 36,000,000,000 feet. The Northern Pacific originally received the largest grant ever made by the government to any railroad, and in this grant was included a vast area of the finest timber land in the country; but the railroad sold much of the best of it—nearly a million acres to the Weyerhaeuser Timber Company, and smaller tracts to other large companies, in many of which the Weyerhaeuser family and their associates were to some extent interested. Notwithstanding these sales, the Northern Pacific was in 1914 the third largest timber holder in the United States, still owning 8.6 per cent of the unreserved timber in Washington and nearly 30 per cent of that in Montana.

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[3] The average stand per acre is about 32,000 feet in the Pacific Northwest, 6100 in the southern pine region, and only 5600 in the Lake states. Even Montana has an average stand of 7300 feet per acre, which is above that of the Lake states and above that of any state in the South except Louisiana and Mississippi. Oregon has the heaviest stand, with an average of 39,500 feet per acre, and Washington and California rank only slightly lower.

OWNERSHIP IN THE SOUTHERN PINE REGION

In the southern pine region, there were no such enormous holdings as the three just described in the Pacific Northwest, yet even in the southern pine region a large proportion of the timber was in the hands of a comparatively few large holders. In Louisiana, the greatest timber state in the South, fourteen holders owned 32,000,000,000 feet of timber—more than the total stand of either Wisconsin or Minnesota; and in the southern pine region as a whole, these fourteen holders had over 4,500,000 acres of timber land, with 50,000,000,000 feet of timber. Most of the cypress of Louisiana was found in a comparatively limited area covering the river and delta parishes in the southern part of the state, especially in the great swamps; and the great bulk of the timber was in a very few hands. Fourteen holders in this state owned three fifths of the supply. Florida is perhaps as nearly owned by a few large holders as any state in the Union. Of the total land area of the state, 54 per cent was held by 290 holders, according to the Bureau of Corporations. The 182 largest holders owned nearly 17,000,000 acres of land altogether, some of it timbered.

It should be stated that considerable of the timber acreage owned in the South was owned in the form of timber rights and not in fee. This does not seriously affect the significance of the figures given, however, because the timber is itself the important item rather than the land, and because the fee to the land is also generally in the hands of large holders.

OWNERSHIP IN THE LAKE STATES

In the Lake states, the ownership of timber lands was more concentrated than in the southern pine region. One of the holders in this region had over 1,500,000 acres, another 626,000, and several others owned holdings of more than 300,000 acres each. Six holders in Minnesota had 54 per cent of the white and Norway pine in the state, and the same number in Michigan owned over half.

COMPARISON OF OWNERSHIP IN THE DIFFERENT REGIONS

Of the three great timber regions studied—the Pacific Northwest, the southern pine region and the Lake states—the Pacific Northwest contained the largest holdings; and it was there that the greatest proportion of the timber was in the hands of the few very large holders. More than one third of all the timber in the Pacific Northwest was included in eight holdings, while in the Lake states it took forty-four holdings, and in the southern pine region, 159 holdings to represent the same proportion. In the Pacific Northwest, holders of over 3,500,000,000 feet each owned 50 per cent of the timber, in the Lake states, 12 per cent, and in the southern pine region only 8.7 per cent.

There are several reasons why the very large holders did not have so much of the total supply in the southern pine region as in the West. In the first place, there was no railroad grant in the South which compares in size with the Pacific grants. In the second place, the stand is not nearly so dense in the South. Moreover, the lumbering operations of many years have brought most parts of the South to a condition unfavorable to assembling immense holdings. Large buyers, whether they plan to establish a mill or to sell their timber standing, prefer solid blocks of virgin timber, and the parts of the South where considerable areas of such forest still exist have for some years been comparatively restricted. Probably a more important factor, however, in the determination of the size of holdings has been the price at which the timber could be bought. It is true that vast tracts of land in the South were sold at low prices by the government many years ago; but when investors began to assemble very large holdings, the timber in the Pacific Northwest could be bought at a lower price, compared with its probable future price, than that in the South.

While it is true that a few very large holders owned a far greater proportion of the timber in the Pacific Northwest than in either of the other two regions, it was in the southern pine region that large holders had by far the greatest fee acreage. Thus, 835 holders, owning each 60,000,000 feet or more, had the fee to 43,230,000 acres in the South, while the 702 similar holders in the Pacific Northwest owned only slightly over one half as much land. In order of the average size of land holdings, the Lake states stood first, with an average of 56,000 acres for all holders of 60,000,000 feet or more; the southern pine region came next with an average of 52,000 acres; while in the Pacific Northwest, despite the enormous size of some holdings there, the average was not quite 33,000 acres. In connection with this, it must of course be remembered that the average stand is much greater in the latter region.

In acreage of timber controlled by the larger timber owners, Florida stood first, with 13,030,000 acres in the hands of owners of 60,000,000 feet or over. Louisiana came next with only slightly over half as much—7,307,000 acres; and no other state has half as much as Florida. Oregon, Washington, Michigan, and California followed in order, with 5,000,000 or 6,000,000 acres each.

TIMBER OWNERSHIP OUTSIDE THE INVESTIGATION AREA

Although the Bureau of Corporations made no investigation outside of the regions described, there is every indication of a very high degree of concentration in the ownership of timber outside the investigation area, especially in the Appalachian region from Maine to northern Georgia, and in the southern Rockies. Many timber companies owning within the investigation area also have large tracts in various other regions; and some of them have invested heavily in Canadian and Mexican timber.

The foregoing pages indicate a sufficiently interesting situation with regard to the ownership and control of our timber lands, but it will be necessary to point out several considerations which make the power of these large holders even greater than mere figures as to acreage and stumpage would indicate.

FACTORS AUGMENTING THE POWER OF LARGE HOLDERS: LARGE HOLDINGS PROPORTIONATELY MORE VALUABLE

In the first place, a large holding is worth more in proportion to its acreage or stumpage than a small holding. A 100,000 acre tract of timber is worth much more than ten times as much as a 10,000 acre ract of similar stand, because it is proportionally much easier to pro-ect from fire and from trespass, and cheaper to log, since it permits he erection of better equipment. This is one reason why there is a onstant tendency for large holding to absorb the small; the small plot is worth much more as part of a large tract than it is alone in he hands of a small holder. Thus, even if the large holding were only of the same quality as the smaller holding, its value would be much greater.

The holder of a large tract is often in a position of much independence. If he has a timber holding of such size and such situation that the erection of a large mill to cut it is economically justified, he can build a mill himself, or he can deal on equal terms with buyers. The small owner is in an entirely different situation. His holding does not justify the building of a mill. If he gets anything for his timber he must sell it. It is likely that not more than one large mill will be in a position to cut and haul his timber economically; and if this is so he can expect little competition among purchasers. Even if there are several large holders surrounding him, they are very likely to have an understanding on the situation, often in the form of buying "zones."

The small timber owner is often practically limited, therefore, to the choice between keeping his timber or selling it at such a price as some large buyer in the neighborhood may think it wise to pay. This is so well recognized that large owners commonly reckon, not only the timber which they own, but also that which they "control"; that is, timber which is so interspersed with their holdings that no one else can well handle it. In this way, some of the large owners of railway grants really "control" solid tracts, alternate sections and all; and in Louisiana, for instance, in the region of the old New Orleans Pacific grant, where the lands were originally granted in odd numbered sections, little of the checkerboard effect of the alternate squares can now be seen on the ownership map, because the purchasers of railroad lands have filled in with even numbered sections which they "controlled."

LARGE HOLDERS HAVE THE MOST VALUABLE LANDS

It was found everywhere, moreover, that the large holders had the most valuable lands—the heaviest stands, and the most valuable species of timber. Thus, the three largest holders in the country had almost all of their lands in the Pacific Northwest, where the stand is generally highest. It is true that the average stand of the Northern Pacific lands is low—only 11,500 feet per acre, but this is due to the fact that the Northern Pacific for many years followed the policy of selling its best lands to timber owners, notably to the Weyerhaeuser Timber Company; and the average stand of the Weyerhaeuser lands is very high—nearly 50,000 feet per acre. The average stand for the Pacific Northwest was 32,000 feet, of the southern pine region 6100 and of the Lake states 5600. In the redwood lands of California, it was found that the six largest holders had an average stand of 113,000 feet per acre, while the next smaller group of holders averaged only 90,000 feet per acre. In the Lake states, the average stand for holdings of 60,000,000 feet and over was one fourth greater than the average stand of holdings below that size; in the southern pine region, two fifths greater; and in the Pacific Northwest, three fourths greater. In the coast states, the average for such holdings was nearly twice as great as the average for smaller holdings. Even among the large holdings—those of 60,000,000 each or more—the relatively smaller holdings had the least timber per acre.

LARGE HOLDINGS INCLUDE THE MOST VALUABLE SPECIES

The large owners had not only the highest stands, but also the most valuable species of timber. In the Pacific Northwest, there is of course no great variety of timber. The forests are almost wholly coniferous, and there are not such wide differences of value as in the South, between yellow pine and the gums, for instance.

In the southern pine region, holders of 60,000,000 feet each or more owned over 50 per cent of the valuable longleaf pine and only 20 per cent of the low value hardwoods; while the smaller holders had 21 per cent of the longleaf and 47 per cent of the hardwoods. In Alabama, hardwoods constituted only 15.2 per cent of the larger holdings and 42.8 per cent of the smaller holdings. The thirteen largest holders in this state had 29.7 per cent of the longleaf pine, 7.3 per cent of the shortleaf and loblolly, and only 3.9 per cent of the hardwoods. In Louisiana, the large holders (those owning 60,000,000 feet or over) had 80.7 per cent of the yellow pine and cypress and only 42.6 per cent of the less desirable timber. In Mississippi, the ten largest holders had 41.2 per cent of the longleaf, 11.5 per cent of the shortleaf and loblolly, and 5.8 per cent of the hardwoods. In Florida, large holders owned 81.1 per cent of the more valuable timber and only 3.9 per cent of the less valuable species.

In all three of the Lake states, there is a very high concentration in the ownership of the valuable white and Norway pine and hemlock. In Minnesota, there is a relatively very low concentration in the ownership of hardwoods and of conifers other than white and Norway pine. Of the large holdings in that state (those of 60,000,000 feet or over), 81.5 per cent was found to be white and Norway pine, and only 18.5 per cent the other conifers and hardwoods; while of the smaller holdings only 24.8 per cent was white and Norway pine and 75.2 per cent the cheaper kinds of wood. The six largest holders in Minnesota had 54 per cent of the white and Norway pine and 2 per cent of the hardwoods. The hardwood stands of Michigan and Wisconsin, unlike those in Minnesota and the southern pine region, are of high average value, and as a consequence, the ownership is centered in a comparatively few holders.

The power of the large timber owners is greatly augmented by a close interweaving of interests, by interlocking directorates, ownership of subsidiary companies or of stock in other companies, and by close affiliation with other kinds of business, particularly with transportation.

CAUSES OF CONCENTRATION OF OWNERSHIP: RAILROAD LAND GRANTS

It will be profitable to note briefly the causes which have been responsible for the remarkable concentration in timber ownership described above. In a word, it might of course be said that this concentration is due to the unwise land policy of the Federal government; but the particular features of that policy must be considered in detail.

No other factor has been so influential in promoting concentration in most regions as the system of land grants to railroads and wagon roads. Among the largest timber owners are some of the original railroad beneficiaries; and a great many of the holdings of large timber companies can be traced to railroad grants. A study of the present ownership of 7,370,000 acres of land grants showed that only 15 per cent is now distributed in small holdings, while 85 per cent is owned by the grantees or their successors or by large timber companies.

The Southern Pacific Railroad is no longer the largest timber owner in the United States, since the forfeiture of 2,000,000 acres of its grant in Oregon; but in an immense area of northeastern California it has retained most of its lands, while several large tracts that once were a part of its grant in Oregon and California have been taken up by large lumber companies—68,000 acres by the Booth-Kelly Lumber Company, 42,000 acres by the A. B. Hammond Companies, 70,000 acres by the Diamond Match Company, 52,000 acres by the McCloud River Lumber Company, and smaller amounts by various other companies.

The Northern Pacific Railroad Company owns only about one third as much timber as the Southern Pacific formerly did, but by its policy of sale to large timber companies, it has done much to make possible the assembling of other large holdings. In southwestern Washington, the Northern Pacific grant, including timbered and non-timbered land, amounted to 2,415,000 acres. Of this, the Weyerhaeuser Timber Company held 1,230,000 acres at the time the Bureau of Corporations reported, the Northern Pacific itself retained about 355,000 acres, and other large timber holders had no less than 340,000 acres, in amounts ranging from 50,000 acres down. Of the entire grant in this great timber region, 80 per cent was held by large timber owners, leaving only 20 per cent in small holdings and non-timbered land.

The Northern Pacific grant covered a large part of the timber lands of northern Idaho, and the railroad is still an important holder, after selling 150,000 acres to one lumber company, 100,000 acres to another, and smaller amounts to still other companies. In Montana, the Amalgamated Copper Company interests have over 1,000,000 acres which were purchased from the Northern Pacific, and the Northern Pacific is itself a very important holder. These two corporations owned 79 per cent of all the unreserved timber in the state, according to the report of the Bureau of Corporations.

Several large holdings in the Pacific Northwest owe their origin to wagon road grants. In western Oregon, almost all of the grant to the Coos Bay Wagon Road Company, aggregating some 100,000 acres, found its way into the hands of a single company. The Oregon Central Military Road grant included 175,000 acres of timber land, later found in the hands of a single company—the Booth-Kelly Lumber Company. The Willamette Valley and Cascade Mountain Wagon Road grant of over 800,000 acres was in 1914 practically all in a single ownership, and about 180,000 acres is heavily timbered. The Dalles Military Road grant of 550,000 acres contained only about 36,000 acres of timber land, but it was practically all in the hands of one company.

Railroad grants have played a less important part in the Lake states than in the West, but even in the Lake states they have been a very important factor in the timber situation. The Chicago & Northwestern Railway Company received grants in Wisconsin and Michigan aggregating 1,065,000 acres, and it still retains 370,000 acres, while most of the rest has passed into the hands of large timber owners. The Marquette, Houghton & Ontonagon Railroad, successor to the Marquette & Ontonagon and the Bay de Noquet grants in the upper peninsula of Michigan, received patents for about 462,000 acres, and sold 402,000 acres to what is now the Michigan Iron and Land Company (Ltd.), which held in 1914 over 320,000 acres in fee. The Fort Wilkins, Copper Harbor and State Line Wagon Road grant, in the same state, amounted to 220,000 acres, and one estate got the title to 174,000 acres of this, and three great copper companies got practically all of the remainder. Three canal construction projects received Federal grants aggregating 760,000 acres in the upper peninsula, and of this amount 670,000 acres (88 per cent) found its way into the hands of large timber owners, in tracts ranging from a few thousand to 300,000 acres.

In the longleaf pine region of Louisiana, a railroad grant—the New Orleans Pacific grant—constituted the basis of several large holdings; in fact, over 90 per cent of this grant was later taken up by large timber owners, in tracts of 133,000, 93,000, 54,000, 45,000, 30,000, 23,000, and 17,000 acres respectively.[4]

[4] The New Orleans Pacific was financed by Jay Gould, and it was a typical Jay Gould road. It was not built until long after the time set by law for its completion; the original grantee, after its charter had been repealed, attempted to assign the grant to the New Orleans Pacific; and in spite of efforts in Congress in the middle eighties to forfeit the grant, it was finally confirmed to the New Orleans Pacific

In Florida, railroad grants have been much less important than swamp land grants. The total received from the Federal government by four land grant railroads here was 2,200,000 acres. It should be stated, however, that Florida gave over 8,500,000 of its swamp land grant to various railroads, and in this way *state* railroad grants greatly facilitated the assembling of large holdings in Florida, for almost all of this land is now included within some of the many large holdings in this state.[5]

SWAMP LAND GRANTS

Swamp land grants are responsible for most of the immense holdings in Florida, and for some in Michigan. Over 730,000 acres of the land belonging in 1914 to the Cleveland Cliffs Iron Company interests in the upper peninsula of Michigan, were originally part of a swamp land grant; so also were some 87,000 acres belonging to the Detroit, Mackinac & Marquette Railroad; 45,000 acres belonging to the Escanaba Lumber Company; 26,000 acres belonging to the Worcester Lumber Company (Ltd.), 23,000 owned by the I. Stephenson interests; and smaller amounts owned by various holders. Without doubt, many of the large holdings in Wisconsin, Minnesota, and in some other states were likewise originally included in swamp land grants.[6]

OTHER STATE GRANTS

A few large holdings were traced to other varieties of grants to the states. Two large holders in Oregon had all their lands in sections 16 and 36. Thomas B. Walker owned over 100,000 acres of California state lands in northeastern California, part of it composed of school sections; and the Collins interests, the McCloud River Lumber Company and the Diamond Match Company had smaller amounts. The Cleveland Cliffs Iron Company owned a large amount of the land granted to Michigan for educational purposes. The Potlatch Lumber Company had 80,000 acres in Idaho which were acquired from the

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in 1887. (See references cited in "Lumber Industry," II, 147. This Gould holding has recently been sold by the Gould estate.)

[5] Cross Reference, pp. 53-55.

[6] Cross Reference, p. 46.

state, almost all in the form of timber rights; and several other large lumber companies had small amounts.[7]

THE CASH SALE LAW

Comparatively little information is available regarding the number of holdings based upon the old cash sale law, but there is some evidence to show that large owners used this law a great deal. In the longleaf pine district of Louisiana, nearly a million acres were traced back to the cash sale law, and nearly all of it was in the hands of large holders. The Long-Bell Lumber Company had 203,000 acres; the Lutcher-Moore interests, 120,000; the Central Coal and Coke Company, 76,000 acres; the Industrial Lumber Company, 58,000 acres; the Chicago Lumber and Coal Company interests, 54,000 acres; Luddington, Wells and Van Schaick, 54,000 acres; the Calcasieu Pine Company and Southland Lumber Company, 46,000 acres; and a dozen other large companies had amounts ranging from 50,000 acres down. The Cleveland Cliffs Iron Company obtained over 200,000 acres of its land in Michigan through the cash sale act. It is reasonable to assume that a study extending throughout the timbered regions of the public land states would reveal a large number of cases where lands were alienated in great blocks under this law, and are now owned by large timber owners.[8]

LIEU SELECTIONS AND LARGE HOLDINGS

The Forest Lieu Act of 1897 has been treated at some length in a previous chapter, but it is interesting to note here that several large holdings are at least partly traceable to this act. Thus, 35,000 acres of the holding of William Wente et al. in Oregon, and 37,000 acres of the Thomas B. Walker holding in California, were taken up with Atlantic and Pacific lieu scrip; 14,000 acres of C. A. Smith's property were taken up in the same way, as were also some 50,000 acres belonging to smaller holders. In western Oregon, 175,000 acres of the Weyerhaeuser lands and 70,000 acres of the lands belonging to other large holders were originally Northern Pacific lieu selections. Altogether, 219,000 acres of the Weyerhaeuser holdings go back to the special lieu selection act creating Mount Ranier National Park; while 53,000 acres belonging to the Northern Pacific, 67,000 acres belonging to the Clearwater Timber Company, and 22,000 acres in the hands of the Edward Rutledge Timber Company can be traced to the same origin.[9]

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[7] Cross Reference, p. 47.

[8] Cross Reference, p. 49.

In the Pacific Northwest, the Timber and Stone Act was, aside from the three railroad grants, the principal means of building up large estates, while in some of the older sections of the country the Preemption and Commutation Homestead laws were used more. The manner in which these laws operated has been discussed sufficiently in previous chapters.

LARGE HOLDINGS NORMAL IN TIMBER OWNERSHIP

Among the causes of the concentration in the ownership of timber lands must be mentioned the fact that large holdings are normal in timber land in most regions of virgin stand, just as small holdings of 160 acres seem to be normal in agricultural lands. A large holding can be more effectively and more cheaply protected from fire and from trespass than a number of small ones, more cheaply logged, and the lumber can be more cheaply sawed and marketed. Efficient lumbering operations, in many sections of the country, demand fairly large tracts of timber—large enough to afford at least a fifteen or twenty years' supply of timber for the sawmills operating. A mill with a capacity of 20,000,000 feet a year—not a large mill in some regions—should have available a supply of perhaps 400,000,000 feet of timber, and in regions of light stumpage this might require nearly 100,000 acres. Even in regions of heavy average stand this would require a holding of not much less than 10,000 acres. Thus it is that, as stated previously, large holdings are worth more in proportion to their acreage or stumpage than small holdings, and tend constantly to absorb them. There is a very definite economic law, according to which timber lands gravitate into large holdings.

SPECULATION

Some of the very large holdings in the virgin timber lands of the West and South should not be ascribed to economy in protection or harvesting, but rather to speculation. When the timbermen of the Lake states and farther east found their supplies of stumpage disappearing, they looked about for places to invest the large amounts of capital which they had accumulated. The forests of the South and West presented attractive fields for investment, and some of these timbermen bought up tracts for speculation—tracts larger than any considerations of efficiency or economy would have dictated.

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[9] Cross Reference, pp. 176-190.

If the forests of the country are to be privately owned, perhaps it is quite as well that they should be owned in large tracts; yet this concentration in ownership contains a threat of future monopolistic control which cannot be ignored.

CHAPTER XII

RESULTS OF OUR FOREST POLICY (CONTINUED): CONDITIONS IN THE LUMBER INDUSTRY

In order to bring out more clearly the unfortunate results of our forest policy, it will be necessary to note the conditions in the lumber industry, for it is in the lumber industry, rather than in the ownership of standing timber, that the effect of our forest policy upon the public is most clearly brought out. A discussion of conditions in the lumber industry will involve some consideration, first, of price-fixing activities among lumbermen; second, the depression in the industry from 1905 to 1915; third, the wasteful methods of lumbering, and fourth, the failure of lumbermen to reforest their lands.

THE SO-CALLED LUMBER MONOPOLY

The matter of price-fixing activities among lumbermen brings up the question of the so-called "lumber monopoly"; and it should be stated at once that in the lumber business there is no suggestion of a single dominating monopoly, or anything approaching it, no single organization occupying such a commanding position as the International Harvester Company once did in its field, or the United States Steel Corporation, or as the Standard Oil Company has long held in the oil business. Such price-fixing activities as have been charged to the lumbermen have not been attributed in general to the National Lumber Manufacturers' Association, but to the various regional associations.[1]

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[1] It is not the purpose of the writer to enter into any exhaustive discussion of the lumber industry in this chapter. For more elaborate treatment than is here possible, see Part IV of the Report of the Commissioner of Corporations on the Lumber Industry: Compton, "Organization of the Lumber Industry": Some Public and Economic Aspects of the Lumber Industry, William B. Greeley, Report No. 114, U. S. Dept. of Agr.: Brief on Behalf of the National Lumber Manufacturers' Association, May, 1916: also articles by Professor George Stevens

LUMBERMEN'S ASSOCIATIONS

Associations among lumbermen existed at least as early as 1883, and since that time, particularly since 1897, there has been a remarkable development of association activity. At the present time there is an association representing the producers of almost every kind of wood—yellow pine, white pine, Douglas fir, hemlock, etc.

These lumbermen's associations and organizations have performed various functions. One function has often been that of trying to give stability to the lumber market in various ways, particularly by issuing price lists, and by organizing curtailment campaigns. Among the other activities have been the following:

1. Advertising of lumber products, and demonstration of their value for various purposes.

2. Establishment and maintenance of lumber grades; trade-marking and grade-branding to maintain the quality of the product and fix responsibility for each shipment; furnishing responsible inspection service to buyers and aiding in the settlement of disputes; elimination of sharp practices, grade manipulation, and fraudulent or irresponsible methods of selling lumber.

3. Maintenance of credit bureaus and sale of fire insurance at cost to members.

4. Investigation and handling of freight rates and other traffic matters of common interest to the manufacturers in a region.

5. Maintenance of employment bureaus and studying of labor conditions and efficiency in the various operations of lumbering.

6. Conduct of various lines of research, aimed to improve the mill products of the region or to extend their use.

7. Promotion of better and more uniform accounting among manufacturers and distributors, and dissemination of data on the cost of production and distribution.

8. Furnishing of authentic, responsible information to the public regarding conditions in the lumber industry.

9. Conducting of studies in forest management.

10. Agitation for better methods in taxation of forest lands.

Besides the ordinary associations, a number of selling agencies have

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and by Professor Compton in the *American Economic Review*, June, 1917, 289; and Sept., 1917, 582.

been formed among the manufacturers of Douglas fir, cypress, and hemlock. The Western Pine Manufacturers' Association has also employed coöperative methods in selling.

THE NATIONAL LUMBER MANUFACTURERS' ASSOCIATION

Coöperation among lumbermen on something approximating a national scale began as early as 1897. In that year, a meeting was held in Cincinnati at which representative lumbermen from various parts of the country met to devise ways and means to secure the restoration of the tariff on lumber, the white pine manufacturers being especially prominent in the movement. The National Lumber Manufacturers' Association was organized in St. Louis in December, 1902, the outgrowth of a friendly intercourse that had existed for several years among a large number of local associations. The white pine manufacturers and the yellow pine manufacturers were leaders in this movement, but the organization now includes some of the strongest associations in the country.

SCOPE AND INFLUENCE OF ORGANIZATIONS

The Yellow Pine Manufacturers' Association included some 300 members controlling perhaps one third of the yellow pine output of the United States. It was connected to some extent with several other associations in the South. By means of a number of common directors, it was connected with the Southern Lumber Operators' Association—a Louisiana association organized in 1906, ostensibly to fight labor unions—and in various ways was related to the Southwestern Lumbermen's Association, and with the Lumber Secretary's Bureau of Information, and with the National Lumber Manufacturers' Association. After the Missouri ouster suit in 1913,[2] this association was reorganized as the Southern Pine Association, with a total of over 150 subscribers and a combined output of about 6,000,000,000 feet—half of the yellow pine production in the Gulf states. The Georgia-Florida Saw Mill Association, the other yellow pine association, is much smaller, but includes seventy-six members, representing 50 per cent of the cut in the territory covered. The California Redwood Association, with seventeen mills, represents 70 per cent of the total production in the region covered, the California White and Sugar Pine Manufacturers' Association 70 per cent, the Western Pine Manufacturers' Association 80 per cent, the Northern Hemlock and Hardwood Manufacturers' Association 50 per cent of the cut of Wisconsin and upper Michigan, the Michigan Hardwood Manufacturers' Association 70 per cent of the cut of lower Michigan, the West Coast Lumber Manufacturers' Association 70 per cent of the total cut in the region covered. Associations affiliated with the National Lumber Manufacturers' Association control 40 per cent of the total lumber production of the United States.

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[2] The suit brought by the state of Missouri against a number of lumber companies for violation of the state anti-trust laws. The suit resulted in the conviction of twenty-five lumber companies, and the imposition of heavy fines, while some of the companies were ousted from the state. (169 Southwestern Reporter, 145.)

The cypress producers are about as strongly organized as any group of lumbermen in the country. The Southern Cypress Manufacturers' Association represents about 50 per cent of the principal cypress mills of the United States. An editorial in the *New Orleans Lumber Trade Journal* refers to the nature of the control over cypress in 1900: "No lumber list ever promulgated has been as rigidly kept as that of the Southern Cypress Association. A deviation of a hair would not be tolerated. Their moderation in good times and their firmness during periods of depression has imparted a stability to the wood highly appreciated by buyers, for they know that an ample power behind will maintain its value intact." At a meeting of the Southern Cypress Manufacturers' Association in 1906, President Wilbert said: "Probably less than one hundred men could be named who control more than 95 per cent of the cypress production."[3] A prominent western lumberman, pleading for closer organization among lumbermen, recently stated: "We need an organized effort to bring about the results, such as you have brought about in connection with your cypress."[4]

The Washington Logging and Brokerage Company was said to include in its membership 85 per cent of the logging companies in the Puget Sound district. Its successor, the Washington Brokerage Company, had exclusive control over the output of its members, at first through a written agreement, later by a tacit understanding. It appears that, in curtailment campaigns, members could operate only by consent of the company. Thus the minutes of one of the meetings of the directors contain the following: "The manager reported that Mr. Izett had made application to him to be allowed to operate his camp and dispose of the logs at $1 off the Association list. On motion it was ordered that the request be denied."[5]

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[3] "Lumber Industry," IV, 723, 724.

[4] *Proceedings*, National Lumber Manufacturers' Association, 1915, 51.

Secretary Beckman of the Pacific Coast Lumber Manufacturers' Association reported in January, 1902: "Eleven cases of alleged price cutting were investigated during the year." Two years later he reported that "the members paid $154,264.93 in penalties, which was divided among members not penalized." Thus it seems that this association imposed penalties for violation of trade agreements, and was strong enough to collect them.[6]

The Maple Flooring Manufacturers' Association had a similar penalty clause in its agreement of 1898. Under this clause each member was required to deposit $500 with the treasurer of the association, to be forfeited in case of any violation of the terms of the agreement, and each member was further required to forward to the secretary each month a sworn statement that his firm had complied with the rules of the association as to prices, grades, and other matters. This association was said to represent 95 per cent of the maple flooring manufacturers in the United States.[7]

EFFORTS TO FIX PRICES

Thus an important function of most lumbermen's associations has been that of trying to fix lumber prices. Most of the associations have at various times tried to control market prices, either directly or by means of curtailment of output.

Previous to 1906, organized activity among lumber manufacturers was openly promoted by lumber associations as part of their official work, and written or oral agreements were commonly made to maintain uniform price lists. At that time, most manufacturers' associations issued price lists regularly, and these were widely used by the trade. In some cases they established price lists at their meetings, and in some cases they established price list committees whose duty it was to issue lists from time to time.

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[5] "Lumber Industry," IV, 356, 361.
[6] "Lumber Industry," IV, 388, 392.
[7] "Lumber Industry," IV, 879.

About 1906, the Federal government, and some of the state governments as well, became very active in the enforcement of the anti-trust laws, and the lumbermen's associations resorted to various schemes to conceal their activities. Some of them issued "market reports," or "statements of market conditions," or lists of "prevailing prices," or "current prices." These "market reports," etc., were in the same form and served the same purpose as did the "price lists" of the earlier days, and they have been issued by certain associations from that time down to the present.

During the first few years of the "market reports," the prices approximated the actual selling prices, but later some associations substituted what might be termed high "basis" lists in place of the "market reports." The prices shown in these "basis" lists were purposely fixed above the market price, while discount sheets were issued to indicate actual selling prices.

In some instances, lumber associations have got lumber journals, printing houses, or so-called "information bureaus" to print and issue these price lists. Some of the cypress manufacturers have thus issued price lists under the name of a printing company—Miller and Brandao, and later the Brandao Printing Company. The *Southern Lumber Journal* assisted the North Carolina Pine Association in a curtailment campaign in 1913; and the Yellow Pine Manufacturers' Association has employed the Lumbermen's Printing Company to issue price lists from time to time. Some of the Pacific associations have sometimes put the name of the *Pacific Lumber Trade Journal* on the lists they were issuing.

Associated lumbermen have tried various means of securing adherence to price lists. In many cases, agreements have been circulated and signatures required. One of the so-called "Centralia agreements" of 1905 read as follows:

"JOINT AGREEMENT:

"We, the undersigned, hereby agree to maintain the official list adopted at a joint meeting of the Southwestern Washington Lumber Manufacturers' Association and a committee of the Pacific Coast

Lumber Manufacturers' Association, held at Centralia, Washington, March 8, 1905, same to be maintained in all territory, with the exception of 50 cents per thousand discount to yard lines. The above agreement to become void unless signed by 80 per cent of manufacturers and wholesale jobbers.

"Name of firm ....
"Address ...."

POOLS IN THE LUMBER INDUSTRY

Pools have not been common among lumbermen, yet there has been at least one example of this form of coöperation, among the manufacturers of Douglas fir. Under the provisions of the "export agreement" of 1902, the lumber interests were divided into four districts—Puget Sound, Columbia River, Oregon and Washington coast, and British Columbia. The capacity of each mill capable of doing export business was determined by a committee, and to each mill was allotted a percentage of the total export trade. On all export shipments an assessment of $3 per thousand feet was collected by the trustees who managed the pool; and any mill shipping over its allotted percentage was assessed an extra $3 per thousand feet on such excess. A mill shipping less than its allotment was required to pay $3 per thousand feet on its entire allotted percentage; but it might sell its right to another mill. Dividends were declared monthly and semi-annually, 50 per cent of the receipts from shipments being divided among the shippers monthly, while semi-annually, after deducting expenses, the remainder was divided among all members. This pool referred only to the export trade, although some of its promoters enthusiastically claimed that it had an important influence on domestic prices.

OPEN PRICE ASSOCIATIONS

A few of the lumbermen's associations are what may be termed "open price" associations, and this type of organization is being pushed. The theory of this type of association is that each manufacturer should fix his own selling prices as he sees fit and change them when he desires; but he should fix his prices intelligently, that is, he should have the fullest and most accurate knowledge of market conditions. The underlying theory is that instability and disorganization of business are due chiefly to ignorance or misinformation as to actual market conditions, and as to costs of manufacturing and marketing. Accurate knowledge of these matters is assumed to be a sufficient remedy. The Southern Pine Association was recently considering an extension of its work so as to place it upon an open price basis. The Western Pine Manufacturers have a department known as the "information bureau" which has carried on open price work since 1912. Perhaps the most notable example of open price associations is the Hardwood Manufacturers' Association of America. Originally merely a trade association, it has recently adopted the open price plan in its entirety and began operating under it March 1, 1917. It is intended that eventually all hardwoods shall be included, but in the beginning its operation is to be confined to oak, the lumber most commonly produced by its members.[8]

It is not to be assumed that all the price list committees, information bureaus, etc., are suggestive of "open price" associations. In many instances such agencies have tried to fix an artificial price level. The price lists have often represented nothing like the prevailing market.[9]

OTHER EFFORTS TO FIX PRICES

It has long been a common practice among lumber manufacturers to try to effect concerted curtailment of production in order to influence prices. Sometimes an agreement to curtail the output has been circulated among the members of an association, perhaps also among manufacturers who were not members. In other instances, resolutions to curtail have been adopted by associations at their meetings.

Since the associations have become more fearful of government prosecution, they have largely abandoned these practices, but have tried other means of accomplishing the same results. Trade papers have been influenced to proclaim the benefits of a reduced output, association secretaries have issued reports showing the extent of curtailment and urging all members to reduce their output. In some instances, the curtailment campaign has been directed by some association member, "acting as an individual," who has been assisted by association officers, likewise "acting as individuals." In several cases, curtailment movements have been directed by the editors of friendly lumber journals, an illustration of this being found in the curtailment campaign among members of the North Carolina Pine Association during the summer of 1913.

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[8] "Open Price Associations," by Professor H. R. Tosdal; *American Economic Review*, June, 1917, 331-334: *Am. Lumberman*, Dec. 22, 1917, 26, 46; Feb. 15, 1917, 16.

[9] "Lumber Industry," IV, 79, 93, 416.

PRICE ACTIVITIES AMONG RETAILERS

While it is not the purpose of the writer to enter into a consideration of the retailing of lumber, it may be appropriate to point out that among retailers as well as among lumber manufacturers, there have been numerous examples of illegal efforts to fix prices. In some instances, these efforts have been connected with the lumbermen's associations. Thus some of the charges made against the Yellow Pine Manufacturers' Association, and against two other southern associations, in the Missouri ouster suit, were that they had divided territory among retail dealers, had agreed not to sell to so-called "poachers," farmers' coöperative yards, consumers, or any but "legitimate retail dealers." Other less important judicial decisions describe a similar state of affairs.[10]

Lumbermen, manufacturers, and retailers alike have often fought the irregular retail dealers by unfair and underhand methods. They have tried to interfere with the business of mail order houses, by writing in, and by having others write in for catalogues, estimates, etc., in bad faith. They have tried to influence manufacturers to refrain from furnishing lumber to such houses by threats of loss of patronage; in one case they even employed an agent to secure confidential information regarding the business secrets of such concerns, and tried to hinder and embarrass them in various other ways. In one large western city, the retailers jointly fixed prices and deposited a guarantee to play fair, and even hired a secretary to keep watch. Any member found cutting list prices was heavily fined.[11]

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[10] Gibbs et al. vs. McNeeley; 107 Fed. Rep., 210: Grenada Lumber Co. vs. State of Mississippi; 217 U. S., 433: Eastern States Retail Lumber Dealers' Association vs. U. S.; 224 U. S., 600.

[11] *Am. Lumberman*, Dec. 22, 1917, 32: Compton, "Organization of the Lumber Industry," 51. For a discussion of the "exchange" formed by the lumber dealers of Kansas City, Missouri, see the Kansas City *Star*, October 27, 1916.

EFFECTIVENESS OF EFFORTS TO FIX PRICES

As to the effectiveness of price activities, it is very difficult to generalize. Conditions have varied so greatly among the different regions, and at different times, that any general statement is likely to be misleading. The report of the Commissioner of Corporations (Part IV) was largely dedicated to proving the existence of monopolistic conditions in the lumber industry, and it contains a great deal of evidence intended to prove that. On the other hand, lumbermen claim, and there is a great deal of evidence tending to prove, that efforts of lumbermen to influence prices have generally been ineffective, that, in spite of them, lumber prices have generally been too low to cover even the bare cost of production for many lumbermen.

It is the increase in lumber prices since the middle or late nineties which has directed attention to the question of price activities among lumbermen; but there can be no doubt that this rise in prices is mainly due to other causes. In the first place, other causes are ample to explain most, if not all, of this increase. The depreciation in the value of money is responsible for much of it. If it is true, as Professor Fisher estimates, that the dollar was worth two thirds as much in 1914 as in 1896, lumber prices could have risen nearly 50 per cent without indicating any peculiar forces at work.[12] In the second place, the shifting in the main sources of supply, from the Lake states to the southern and western states, will account for much of the rise in lumber prices. In 1896, the Lake states still led in the production of lumber, and even the northeastern states were furnishing considerable amounts. This lumber could be sold in the great consuming centers very cheaply. When, however, these readily accessible supplies were nearly exhausted, and lumber had to be shipped in from the southern states, and even to some extent from the western and Pacific states, higher prices were inevitable. Transportation charges are a very large element in the cost of so bulky a product as lumber. In the third place, the increasing scarcity of lumber might account for an increase in lumber prices. The lumber supply of the country constitutes a limited natural resource, and, with its rapid exhaustion, the forces of supply and demand would account for a considerable rise in prices. Some agricultural products, in the production and marketing of which competition has had its freest action, have increased more in price than lumber, even though, in the case of agricultural products, there has been no prospect of the exhaustion of supply.[13]

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[12] See Compton, "Organization of the Lumber Industry," 80.

It appears thus that competitive forces *would have been sufficient* to cause a very considerable rise in prices. Certain lines of general reasoning likewise suggest that efforts of the lumbermen's associations to maintain price lists could hardly have had any *great* influence on prices. In the first place, there has been some difficulty in securing accurate enough grading of some kinds of lumber to permit effective price control. In the second place, plants are not large, compared with plants in some other industries, are numerous, and widely scattered. Mere physical isolation has been an impediment in the way of effective combination. In the third place, many lumbermen have always been so deeply in debt, so tied down by bond issues, that they had to cut and sell their lumber almost regardless of price, in order to meet interest charges. It is claimed that a few plants which refuse to be bound by price agreements are enough to set low prices in times of depression. Prices are of course set by those lumbermen who *sell*, if there are enough of them, rather than by those who refuse to sell.[14] In the fourth place, it is clear that, since price-fixing activities have almost always been carried on by the associations, there would usually remain the competition between woods, even if the association members were ever so loyal, and ever so strong financially. In the great lumber markets of the country, like Chicago and New York, competition between woods is very persistent.[15]

Competition between woods is not always and everywhere strong enough to insure purely competitive prices. In a certain region and for certain purposes, white pine, for instance, has an element of monopoly advantage over other woods, and might sell at a price above that fixed by free competition, if the white pine producers themselves were sufficiently well organized. This is also true of a number of other woods, although the producers of some species are organized on something approaching national lines, covering most of the entire product, and thus might conceivably prevent any competition between different regions.

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[13] Compton, opus cited, 105.

[14] *Proceedings*, Thirteenth Annual Meeting of the National Lumber Manufacturers' Association, 95.

[15] Compton, opus cited, 41 et seq.

Akin to the competition of woods is the competition of substitute building materials—brick, cement, stone, steel, fiber, and the great variety of substitute roofings. Any great increase in the price of lumber for building purposes would lead to an increased use of some of these substitutes.[16]

It may be worth while to point out that competition between lumber manufacturers who are owners of their own standing timber may be on a somewhat different basis from competition between retailers, or even between manufacturers of some other products. There has been a general tendency in the past for lumber prices and timber prices to rise, and, if a lumber manufacturer refuses to cut and sell his timber at prevailing prices, it means that he is losing, or, perhaps better, is failing to make a profit—as a manufacturer; but he may yet make a profit as owner of the standing timber if the value of standing timber rises. Thus he is in a somewhat different position from that of an ordinary merchant, for instance, who, when he fails to make a sale, has definitely failed to make his profit, and may even lose heavily on the stock remaining on his hands. The profit which may be anticipated from the rise in timber values would ordinarily set what might be called a "discounted future price," below which the market price of lumber could hardly go, if all of the lumbermen were strong enough financially to follow what they recognized as the wisest long-run policy. Many lumbermen must meet heavy fixed charges, and so must sell almost regardless of price, but those who are in a position of financial independence have a rather stronger position in the market than competitors in some other lines of industry. This consideration is most important in the case of woods which are approaching exhaustion, as, for instance, white pine, or those which for any reason are increasing rapidly in value. It must be noted, however, that prices of some grades of lumber did not increase at all between 1905 and 1915, but even declined somewhat; and, while prices during the past few decades have shown a general tendency to advance, that tendency need not be regarded as prevailing always and everywhere. Many lumbermen have lost money on standing timber.

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[16] Report No. 117, U. S. Dept. of Agr., Office of Secretary.

It will be pertinent to point out here that, since the economic law of supply and demand determines market value, efforts at price fixing must be ineffective unless accompanied by some limitation of supply. Even experienced lumbermen have probably sometimes been mistaken as to the effectiveness of some of their efforts to maintain price lists.

Thus general reasoning indicates that price activities have *generally* had little influence. Much of the direct testimony on the subject points to the same conclusion. In the first place, a study of the trade news in the lumber journals indicates clearly that lumber prices were often largely beyond the control of the associated lumbermen. The following excerpts are a few of many that might be given:

"Many of the small [yellow pine] mills which derive their logs by purchase from others' lands, and must pay for them as they saw, and are thus bound by contracts, are running and placing their lumber on the market at the best prices they can obtain. It is the product of such mills that is being shipped in transit, is being sold by brokers in the large markets at a variety of prices, and is causing a large part of the prevailing demoralization."[17]

"The committee on values of the Southern Lumber Manufacturers' Association in January and February sought to arrest the tendency to a decline in prices by fixing new bases for the list, but in this case the all-powerful trade law of supply and demand asserted its supremacy over the law of fiat, and prices remained persistently weak."[18]

"The condition of stocks of white pine is such that it is practically impossible to make a price list which will fit them all; consequently each man with lumber to sell is putting his own price on it according to how his stock is assorted."[19]

"The efforts of wholesalers to maintain list price [of hemlock] early in the spring have practically failed, and the man who wants

[17] *Am. Lumberman*, Mar. 21, 1908, 38.
[18] *Am. Lumberman*, Mar. 26, 1904, 15.
[19] *Am. Lumberman*, Minneapolis news, Feb. 22, 1902, 48, 49.

hemlock lumber to-day and has money to pay for it has the price situation in his own hands."[20]

"Spruce demand has remained about the same with low prices and a general disregard for the list by some of the larger manufacturers."[21]

"The most glaring instance of unwise management is the maple flooring association. The price list adopted in July was unwarranted by market condition, and, as orders did not come in, many firms began to cut freely. This was hushed up at first, but discontent grew, the 'Boxers' started out with long knives and now the slashing has become general."[22]

Not infrequently market prices have gone above the list, as the following quotations indicate:

"For weeks buyers of white pine had thrown away all bargaining for prices and freely offered anything which would bring the stock. Above the list was common at that time, and the present list is conceded to be only a fair representation of the real strength of the market."[23]

"Many items of white pine on the list are selling at a premium."[24]

"It was shown that sales were being made in nearly every instance at a figure considerably higher than the list."[25]

The Missouri ouster suit of 1913, in which the Supreme Court of Missouri found some twenty-five lumber companies guilty of violating the state anti-trust law, furnishes little proof of the *effectiveness* of price activities. There was no doubt that the lumber companies had been guilty of technical conspiracy in violation of the anti-trust law, had *attempted* to fix prices; and the court even held that these efforts had been successful, but did not make much of the question of success. Possibly the decision should not be regarded too seriously anyhow, for much of the evidence rests on the investigation of a single commissioner of facts, and the tenor of his report and of the decision based on it indicates that perhaps the zeal to find the truth was over-

[20] *N. Y. Lumber Trade Journal*, May 15, 1908, 27.

[21] *Am. Lumberman*, Aug. 8, 1908, 78.

[22] Boston news in *Am. Lumberman*, Feb. 14, 1903, 63.

[23] Minneapolis news in *Miss. Valley Lumberman*, Mar. 30, 1906, 34.

[24] Minneapolis news in *Miss. Valley Lumberman*, May 31, 1907, 35.

[25] *Am. Lumberman*, Oct. 14, 1905, 33; report of meeting of Oct. 3, 1905.

shadowed by a desire to convict. Some of the statements of fact were inaccurate, and the tone of the decision was more like that of an attorney for the prosecution than that of a judge or court dispassionately weighing the merits of the suit. Lumbermen generally deny that there was any justice in the decision.[26]

While efforts at price fixing have generally been futile, there is evidence that such efforts have *sometimes* had an appreciable influence. The following excerpts from lumber journals tend to support this conclusion:

"The market broke very rapidly after the price agreement went off in March."[27]

"There is a stubborn rumor that the yellow pine manufacturers intend to advance their prices at an early date, and many of the yards are hurrying to place their orders before this advance shall become effective."[28]

"The price list which went into effect October 15 is meeting with high favor, although some of the wholesalers report inability to secure some of the figures named. It has had the effect, however, of greatly increasing the actual selling price."[29]

"All of the items are in poor supply at initial points and while the new list may not be maintained at the start, it will mean an advance in actual selling prices about equal to the advances ordered."[30]

"The recent price lists of the Georgia Sawmill Association and the Southern Lumber Manufacturers' Association are being strictly adhered to, and yellow pine is to-day one of the strongest features."[31]

"The solid front that the mill operators are maintaining in their insistence on firm prices at the December advance renders the picking up of lumber at concessions in prices next to an impossibility."[32]

"There is not much revival of demand, but the trade is in good shape and dealers say that prices are holding firm, though they do admit that but for the new White Pine Association there would probably have been a lot of cutting that has not developed now."[33]

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[26] *Proceedings*, Thirteenth Annual Meeting of the National Lumber Manufacturers' Association, 31, 32.

[27] Kansas City news in *St. Louis Lumberman*, May 15, 1904, 37.

[28] St. Louis news in *Am. Lumberman*, Aug. 26, 1905, 67.

[29] St. Louis news in *Am. Lumberman*, Nov. 5, 1904, 61.

[30] St. Louis news in *Am. Lumberman*, Jan. 14, 1905.

[31] New York news in *N. Y. Lumber Trade Journal*, Apr. 15, 1902, 22.

[32] *Am. Lumberman*, Jan. 13, 1906, 69.

"Half a dozen operators control practically all the hemlock that comes to this market, and from all the information I can gain the present price is being maintained, with no prospect of a break. The present of $17 will not be lower this season, in the opinion of those most interested. In fact, holders of hemlock state with confidence that they have the situation fully in hand."[34]

Regarding the cypress market, some of the following quotations from the lumber journals are significant of the situation in 1901:

"Prices are up to the full list, the cypress representatives here stating that not a foot is being sold under the agreed prices."

"Prices are unchanged and they will remain so for some time to come. Full list is ruling absolutely."

"Prices remain steady and the list goes in this territory at least."

"Every order is placed at full list prices."

"List is rigidly maintained."

"Prices are at list, as they have been all this season."

"The advance made two weeks ago is being obtained in all instances."

"Cypress is selling at full list and the firmness of the market is not questioned in any quarter."

"Prices are being maintained everywhere with the most scrupulous fidelity to the list."

Such a situation as this has been very common in the cypress market, although in times of depression and slack demand, as, for instance, in the latter part of 1907 and in 1908, there was plenty of evidence that the cypress list was not strictly maintained.

Much of this evidence must be discounted heavily. Trade journals and officials in the lumber associations are often enthusiastic promoters of coöperative activity, and are prone to exaggerate its effectiveness. Many lumbermen were doubtless themselves mistaken as to the effect of their price activities. Even with due allowance for exaggeration, however, the evidence presented clearly indicates that price lists have sometimes had an influence. It is probably in a falling market that such lists have had the most effect.[35] Some lumbermen have claimed that price lists were not issued with any intent to influence prices, but merely as a record of the prevailing market. In some instances this has been true, but many of the lists have not corresponded to market prices even when first issued; and there is conclusive evidence that, in some cases, lists were not even intended to represent the market.

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[33] *Am. Lumberman*, Apr. 9, 1904, 57.

[34] *N. Y. Lumber Trade Journal*, Jan. 1, 1904, 9.

Although price lists have sometimes raised prices somewhat, they may nevertheless have been justified, even from the point of view of the public, for they have at times given some measure of stability to a peculiarly unstable field of industry; a field in which blind and unfettered competition has often been very severe, and in which the average rate of profits has not been excessively high. A reasonable degree of stability in any industry is to be desired.

EFFECTIVENESS OF CURTAILMENT CAMPAIGNS

Price lists could not have any great or lasting effect upon lumber prices unless accompanied by some regulation of the supply. Lumber associations have often attempted, however, to limit the supply through organized curtailment agreements; and these curtailment agreements have sometimes had an appreciable influence upon prices.

Curtailment agreements would sometimes be fairly easy to maintain if operators were not too deeply in debt, and were strong enough financially to follow out their own interests. Loyalty to a curtailment agreement has sometimes involved very little sacrifice. In a depressed market, when lumbermen have had to sell their product at a price below actual cost of production, those who were also owners of their standing timber might easily profit by closing down for a time, and indeed many of them did so, even though not bound by any agreement. They could count upon an increase in the value of standing timber to balance in some measure the immediate loss of income. Timber values may not increase as much in the future as they have in the past, but they will probably increase somewhat.

There is a great deal of evidence indicating that curtailment campaigns have sometimes influenced prices. There is, in the first place, the testimony of those familiar with the industry. Speaking of a curtailment campaign carried on in 1904 by the Southern Lumber Manufacturers' Association, one influential lumberman stated: "That values are what they are to-day is the result solely of this curtailment movement."[36]

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[35] "Lumber Industry," IV, 126, 563, 681.

Mr. R. A. Long, one of the most influential men in the yellow pine field, in speaking of curtailment among the producers of yellow pine, said in 1905: "Some of the most successful men in our line of business shook their heads and made the statement that we could not 'legislate prices'; that supply and demand must govern and that the supply would be governed by the 'survival of the fittest.' In spite of these prophecies we succeeded in securing the coöperation of about 80 per cent of the manufacturers of yellow pine, and so the plan was entered into and tested between July 1 and October 1. In less than 10 days from July 1 the downward tendency of prices had been checked, and within 30 days a substantial advance had been made. Before we had reached October 1 it was believed that the commencing of the operation of our mills on full time on that date would practically mean a loss of all we had gained, and an effort was made, and accomplished, continuing the curtailment until January 1 of this year. On October 15, a further notable advance was made. Desiring to be as nearly correct as possible as to the extent of the advance between July 1 and October 1, and as to the further advance made between October 1 and January 1, I addressed a letter to a number of the larger manufacturers asking their views on this point, also as to whether or not they attributed the advance to the curtailment movement or otherwise. These replies did not vary to any great extent, and the summary of the same developed an average advance between July 1 and October 1 of $1.19 per M. and between October 1 and January 1 of $1.04 per M., all agreeing that the curtail movement was that which brought about this favorable condition."[37]

A letter written in 1912 by C. E. Patten, "Chairman of the Manufacturers' Curtailment Committee" of one of the coast associations, contains the following: "Our close-down during December, January, and February was a very satisfactory one, fully 50 of the mills being closed from 30 to 90 days. In addition to this, a large number of our mills are running only 8 hours per day or 5 days per week. I am endeavoring to get as much of a curtailment as possible but it is pretty hard to hold some of them in line, as we have a great many mills that through pure cussedness will not curtail, in fact, one or two of them sawed more lumber in 1911 than they did in 1907. Then of course we have a good many who are in such financial condition that they are unable to curtail, but even with all this, at the present time we are having a very large curtailment, which I hope will continue until the first of July or until conditions improve."[38]

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[36] "Lumber Industry," IV, 129; *Miss. Valley Lumberman*, Jan. 27, 1905, 35.
[37] "Lumber Industry," IV, 76.

A report of a mass meeting of shingle manufacturers held in Seattle, December 19, 1905, appearing in the *Pacific Lumber Trade Journal* of January, 1906 (p. 46), contained the following: "In calling the meeting to order President Bass reported that out of 299 straight shingle mills in western Washington, 252 mills were then coöperating in the close-down policy, and out of forty-seven mills outside the fold, not to exceed twenty-five were able to operate steadily owing to log jams, water conditions, and the car shortage. At the meeting, five more mills signed up the closing agreement, making 257 out of the possible 299 mills to be secured. He also stated that the mills had up $120,000 in cash forfeitures with which to bind their agreement and the actual curtailment effected was not short of 36,000,000 shingles a day."

Regarding the extent and effectiveness of this close-down, the *Pacific Lumber Trade Journal* (February, 1906) had the following to say: "The 'close-down' was an absolute and unqualified success. Ninety-three per cent of the shingle manufacturers in Western Washington were identified with the movement, and not one broke the agreement. As a result of this curtailment probably 5,000 cars of shingles were kept off the eastern markets during a season when shingles cannot go into consumption and when buying is of a purely speculative nature. The benefit that this 'close-down' has been to the manufacturer is represented in an advance of from thirty-five to fifty cents a thousand on the several grades. If these prices slump it will be the fault of the manufacturers, who now have the situation well in hand, and, by coöperating, can eliminate many of the unnecessary evils that have demoralized the industry in former years, particularly the year of 1905."

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[38] "Lumber Industry," IV, 467.

Of course this testimony, like the testimony regarding the effectiveness of price lists, is probably much exaggerated; but it indicates that curtailment campaigns have sometimes achieved a measure of success. Where forfeitures or penalties were imposed, as in some of the cases mentioned, it must have been possible to keep members fairly well lined up, at least for a time.

In estimating the significance of organized close-downs, it should be remembered that in times of depression many mills would curtail their output somewhat, or perhaps even close down altogether, without any agreement or understanding whatever. It would be a very serious error to assume that all, or even most, of the curtailment was due to agreement. Organization, where it is efficient, merely makes the curtailment more effective.

Even if it be assumed that organized curtailment of output has sometimes had an appreciable influence on prices, it does not follow that it is to be unreservedly condemned. If the lumbermen merely limit the cut and then leave prices to the law of supply and demand, they are conserving our timber supply. This results in higher prices at present of course, but logically it should increase the future supply and so result in lower prices ultimately—exactly what conservationists are calling for.[30]

POSSIBILITY OF FUTURE TROUBLE

It thus appears that although almost all lumbermen's associations have tried to fix prices, either directly through adherence to a price list, or indirectly through organized curtailment, and although some of these efforts have achieved a measure of success, yet, on the whole, consumers have in the past had little cause of complaint. The situation is unsatisfactory mainly in that it contains the possibility of trouble for the future. There are reasons for believing that price fixing may be more successful in the future.

In the first place, the amount of standing timber is decreasing rapidly. The Forest Service has estimated that the present timber supply of the country would last fifty-five years at the present rate

[30] For an expression of this view see *Am. Lumberman*, Aug. 19, 1916, 26.

of consumption. It will not be exhausted as soon as that, of course, for reforestation will get more attention in the future, and, as the supply disappears and prices rise, the rate of consumption will tend to decrease; nevertheless, the timber supply will certainly decrease very greatly within the next few decades, and the holders of remaining supplies will perhaps occupy a correspondingly stronger position in the market. Probably there will be fewer operators, at least in the regions of good remaining virgin timber. In the past there has been a tendency in some regions for the smaller and financially weaker timber holders to furnish a disproportionate amount of the annual cut, and, if this tendency should persist, the smaller holders would tend to be eliminated from the field, leaving a larger proportion of the supply in strong hands, capable of taking advantage of a favorable situation. It may be, too, that there will be a tendency in the more heavily forested regions for large mills to displace smaller mills, because of superior economies. Some indications of such a tendency have appeared in recent years.

It would be easy to exaggerate these dangers, however. In the first place, as to timber ownership, the government is cutting much less than the annual growth in the national forests, and thus will have a larger proportion of the total standing timber in the future, although it will be many years before the government timber will be a very important factor in most markets. Regarding the size of mills, it may be said that there will always be a field for the small mill, in some regions a wider field than now. As the more valuable and accessible timber is cut, lumbermen will necessarily resort to inferior stands, either second-growth timber on cut-over lands, or inferior virgin timber, and, on such lands, small mills will prove most economical.

INSTABILITY OF THE LUMBER MARKET

Whatever may be our guess as to probable future conditions in the lumber industry, lumbermen rightly claim that during the past decade consumers, or at least retailers, have generally had no reason to complain; that they have often got lumber below actual cost of production; that lumbermen, as *manufacturers* of lumber, have generally made very low profits, or sometimes no profits at all; that the situation has been far less satisfactory from the point of view of the lumbermen than from that of consumers.[40]

The lumber market has always been very unstable. Prices of most woods have fluctuated widely and often. Occasional years of high prices have been followed by longer periods of depression and low prices. Taking the years between 1907 and 1915, for instance, the average price of southern yellow pine shows a range of from $12.50 to $16.50, or 32 per cent of the lower rate. The average price of Douglas fir in the same period ranged from $9.60 to $15.20—a spread of 58 per cent of the lower rate. Such an instability must be regarded as an evil from every point of view.[41]

THE LUMBER INDUSTRY AND TIMBER SPECULATION

One of the vital weaknesses of the lumber manufacturing business has been its close alliance with timber speculation. Twenty years ago much of the timber in the West was worth very little, and purchasers were able to buy stumpage at from three to twenty-five cents per thousand feet. At that price it was good investment, for, with the development of lumbering, the construction of transcontinental railroads, expanding markets, and the influence of eastern conceptions of timber values, enhancement of stumpage prices was very rapid—particularly from 1900 to 1908. There was a rush of entrymen to the public timber lands, not to settle them, but to acquire salable claims; and millions of acres were patented from the government every year. The agents of lumber companies and eastern investors bought up claims and "blocked up" holdings while local speculators assembled properties of a few thousand acres. Trading was active, hundreds of men made fortunes by buying and selling stumpage, and confidence in future timber values seemed unlimited. It was the common feeling that prices would go up—as far as in eastern lumbering regions. Within ten or fifteen years, the initial cost of government timber was multiplied in subsequent transfers—ten, fifteen, or twenty times, in some parts of the Northwest."[42]

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[40] *Proceedings*, National Lumber Manufacturers' Association, Thirteenth Annual Meeting, 172 et seq.

[41] "Public and Economic Aspects of the Lumber Industry," 21-23; *Am. Lumberman*, Jan. 1, 1916, 52: *Forest Bul.* 34, 43.

[42] "Public and Economic Aspects of the Lumber Industry," 12 et seq.: *Am.*

It was during this period that the conservation movement gained great momentum; and the establishment of the forest reserves gave an impetus to this speculative fever. The public reservations and the discussion of future timber shortage were generally interpreted as pointing to higher values; and speculators hastened to secure available timber lands before they could be withdrawn. Many persons unfamiliar with the industry, and less conservative than experienced timbermen, were encouraged to invest in stumpage. Some speculators and timber companies took advantage of the boom in timber values in capitalizing their holdings for borrowing.

A concrete measure of the speculative activity during this period is found in the present capitalization of stumpage in the western states. The assessed value of private timber lands in California was about $51,000,000 in 1916; in western Oregon and Washington, $170,000,000, exclusive of the considerable quantities of stumpage on areas classed as "unimproved lands"; and in the "Inland Empire," approximately $140,000,000, or, for the whole Northwest, $358,000,000. Considering the basis of assessment in the several regions, and the prevailing price of stumpage of average quality and accessibility, the rated value of the private timber lands in California, Oregon, Washington, Idaho, and western Montana today is probably not far from $1,100,000,000. Such capitalization, built up mostly within two or three decades, involved extensive use of borrowed money. Much of this was secured through a conservative mortgaging of assets, bodies of timber in some instances being bonded to finance the construction of sawmills and logging railroads. There was much unsound financing, however. Timber was often heavily mortgaged to provide funds for further purchases, and the process repeated with each new block acquired. Manufacturers sometimes bought additional timber with earnings which should have been used to reduce indebtedness or improve their plants.

The early borrowing was usually in the form of short-term notes, at the high interest rates characteristic of undeveloped sections of the country; but, about 1905, a special form of security appeared—

Lumberman, Aug. 7, 1915, 1: *Review of Reviews*, May, 1916, 583. See also a Brief on Behalf of the National Lumber Manufacturers' Association, May, 1916, 23 et seq.; and *Cong. Rec.*, Apr. 19, 1916, 6459.

the timber bond, issued as a first mortgage upon timber holdings and manufacturing plants. Bonds were usually to be refunded serially by setting aside a stated sum from the proceeds of lumber sales. The common interest rate was 6 per cent, but expenses in issuing such securities, and their usual sale below par, often made the actual cost of the capital 7 per cent or more. Bonds, in series running for ten or fifteen years, had the disadvantage of prescribing in advance the cut of lumber necessary to meet futurities, regardless of the condition of the market.

The capitalization of timber was, broadly speaking, a slower and saner process in the southern pine belt than in the Northwest. Large holdings were slower to develop. For a long period timber ownership was well distributed, and many mills bought but small quantities of stumpage from time to time; but about 1905, competitive timber buying began on a large scale, and stumpage values went up rapidly. Many bond issues were floated in connection with large timber purchases between 1905 and 1912. In an investigation of twenty-seven companies in this section, timber bonds aggregating $39,000,000 were found outstanding. In 1914, an analysis of 108 companies, including ten that were free from debt, showed a total indebtedness of over $52,000,000—$1.11 per thousand feet on the timber represented.

COST OF TIMBER OWNERSHIP

Interest charges were not the only charges to be met. Taxes have had to be paid, regardless of whether the property was bringing in any income or not. The tax burden has varied greatly in the different forest regions, but most investigators have been of the opinion that, through underassessment and lax administration of laws, taxes have not been a very heavy burden in most regions. Occasional gross inequalities in assessment, however, and uncertainty as to the future, have doubtless been something of a menace to lumbermen and to the stability of the industry.[43] Cost of fire protection has added slightly to the carrying charge. This cost, however, including such fire losses as may occur, rarely exceeds one tenth or one fifth of a cent per thousand feet of stumpage yearly, although in northern Idaho fire protection has cost one third of a cent per thousand feet.

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[43] *Sunset Magazine*, Apr., 1916, 35: *Jour. Pol. Ec.*, Dec., 1915, 971.

Broadly speaking, if taxes and protection costs be added to the investment and if interest be compounded at 6 per cent, the amount invested in the property doubles every eight or ten years. It is apparent that any timber, no matter how cheaply obtained, will acquire a high book value when the period during which it must be carried is measured by decades. Ten cent stumpage obtained from the public lands in 1880, and carried at 6 per cent interest on first cost and on current outlays for taxes and protection, becomes $1.50 stumpage in 1916 and $6 stumpage in 1940.[44] Some careful students of the lumber industry are inclined to doubt whether private individuals can afford to own any but readily accessible timber. Representative Johnson of Washington stated in Congress recently that many large holders had found their properties so burdensome that they would be glad to have the government take them over.[45]

For many years previous to 1907, timber values generally increased fast enough to cover all these carrying charges, and in many regions yield great profits to investors. Between 1907 and 1915, however, there was no material advance in values, except in the yellow pine region; and many lumbermen found themselves hard pressed to meet obligations they had incurred in earlier years. Since 1907, a great many lumber operators have been compelled to saw up their stumpage almost regardless of market values, in order to meet heavy carrying charges, and in this way the market has been badly demoralized much of the time. It was noted in 1913 and 1914 that a marked decline in the price of yellow pine lumber was accompanied by an equally marked increase in the stock on hand, because some hard-pressed operators had to saw more lumber rather than less, as the price went down, in order to meet their fixed charges. Thus a decline in the speculative value of timber holdings fostered rapid forest destruction. Beginning about 1915, lumber prices rose again because of the war demands, and at the present time (1919), the general price level is higher than it has ever been before in the history of the industry.[46]

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[44] For an interesting computation by Professor Kirkland of the University of Washington, see the *Forestry Quarterly*, 12, 432. See also an article by Professor Compton in the *Journal of Forestry*, Apr., 1917.

[45] *Cong. Rec.*, Apr. 19, 1916, 6459.

WASTE OF TIMBER

Waste of natural resources of every kind has always characterized new countries and especially the frontier; and it was inevitable that the lumber business should be carried on wastefully. That which has only slight value is never used economically. This waste takes several forms. First, timber is cut in advance of any real economic demand, timber which might better be left until the country needs it; second, the trees felled are but partially utilized, and large amounts of low-grade material are destroyed in the woods or mills; and third, inferior species in the forests are wholly or partly left uncut.[47]

The first element of waste results from cutting timber solely on account of the financial difficulties of timber or mill owners, and then forcing it upon the market at a sacrifice price, often less than the cost of production. Such lumber often represents, not competition in manufacture, but competition in unloading burdensome timber holdings, a patent ill effect of the close connection between lumber manufacturing and speculation in timber lands. Hence results a surplus of stock, to be disposed of like the "transit" cars of lumber shipped into Chicago by the hundreds during 1914 and 1915 and sold on the way or after arrival for whatever they might bring.[48]

Sidelights on this situation illustrate the wastes of overproduction. Some operators on the west coast with rafts of high-grade fir logs, which in good times are manufactured largely into flooring, stepping, silo stock, and other high-quality products worth probably $20 per thousand feet, in 1914 and 1915 cut such timber into railroad ties and other cheap products at $8 per thousand or less, because this was the only business to be had at the time, and because of physical and financial inability to carry large stocks of logs until a better market was available. A yellow pine company in the South, during the winter of 1914-1915, burned 2,000,000 feet of No. 4 boards under its boilers, because there was no longer room to carry this material in its yards. Another large operator dumped from 2 to 3 per cent of the entire cut into the waste burner because yard room was exhausted. Many companies experienced losses from deterioration of lumber in their yards, on account of the extra stock on hand and the unusually long time it had to be carried.

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[46] "Public and Economic Aspects of the Lumber Industry," 24 et seq.: *Proceedings*, Thirteenth Annual Meeting of the National Lumber Manufacturers' Assoc., 21, 167, 172: *Am. Lumberman*, Mar. 18, 1916, 44.

[47] "Public and Economic Aspects of the Lumber Industry," 64 et seq.: Brief before the Federal Trade Commission on Behalf of the National Lumber Manufacturers' Association, May, 1916, 33; Jan., 1916, 74.

[48] "Public and Economic Aspects of the Lumber Industry," 64 et seq.

The second element of timber waste—poor utilization of the trees felled—arises largely from the cheapness of timber in the United States. Greater or less waste of this character has been inherent in lumbering everywhere in the United States, but especially in southern and western logging, because of the lack of diversified wood-using industries and the heavy freights to large markets, which preclude the shipment of material of low value. Even under normal conditions, as in 1912-1913, southern and western loggers left from 20 to 30 per cent of their timber in the woods, some of which would have been put to use for box lumber, cooperage, etc., in eastern Pennsylvania or central New England. It has been estimated by competent authorities that in many instances only 35 per cent of the actual cubic contents of the tree is utilized; the remaining 65 per cent being lost in the stump, in sawdust, slabs, trimmings, broken timber, and low-grade logs left in the woods.

The third element of waste arises in the species of trees found in nearly all forests, trees of lower value than the principal commercial timbers because of poor standing in the trade, or because they yield mainly low grades, and hence cannot be cut or can be cut only in part when the market is poor. In many parts of the East, the leaving of such species, like balsam and hemlock, in the early logging, did not mean a loss, since they were taken off in later cuttings. Often, indeed, they were of value in restocking cut-over lands, even though with inferior species. In western operations on private land, however, most of the timber left is destroyed in the slash fires which usually follow logging, or deteriorates so much before a second cut is practicable that it cannot be credited as a future forest resource.

This waste of timber has in part been an inevitable feature of private exploitation of a cheap natural resource; but it is most unfortunate, nevertheless, for important public interests are involved. Aside from the future needs for lumber, there are the future needs for a great many important wood products—paper, cheap industrial fuel, rosin and distillates of many kinds. The public interest in economical lumbering methods is so great as even to demand government regulation of lumbering on private lands, although that involves such a departure from our ordinary "*laissez faire*" theory of government that it will be difficult to secure.

FAILURE TO REFOREST LANDS

The waste incident to our present lumbering methods would not be so serious a matter if a new crop of timber were growing up to replenish the supply, but unfortunately very few lumbermen are making any effort to reforest their cut-over lands. Just how extensive are these cut-over lands it would be difficult to say. The National Conservation Commission estimated in 1909 that there were 75,000,000 acres of non-agricultural cut-over lands which should be devoted to growing timber. Certainly there are large areas of idle stump land, unfit for agriculture, and producing no timber.

Lumbermen cannot be justly criticized for not replanting their lands. Only under exceptional circumstances could it be done profitably. In the first place, an investment of this character would be a long-time investment. No return could ordinarily be expected in less than fifty years, in some cases even longer, and in the meantime the owner must pay taxes and protect his investment from fire and trespass. Although these two items—fire protection and taxes—are not large, they are too uncertain for a conservative investment. While fire protection is a small item usually, there is always a chance that fire may destroy a part of the entire investment. Taxes likewise, although not a very large item, are uncertain and arbitrary, and, under the unscientific system prevailing in most states, must be paid regardless of whether the lands are bringing in any return or not. An investor who undertook to predict the amount of taxes on his growing timber for fifty years in advance would be dealing in very uncertain quantities.

Even if there were no element of uncertainty, reforestation would seldom present an attractive field of investment. The initial cost of reforesting, together with the cost of protection and taxes, compounded annually for fifty years at 6 per cent, would amount to a very large sum, in all probability much more than the stumpage would then be worth. One writer on the subject has termed tree planting "a risky 6 per cent investment."[49]

Thus the results of private ownership of timber lands, as illustrated in the condition of the lumber industry, have been unsatisfactory from every point of view. Consumers have suffered little from high prices, but have viewed with distrust the repeated efforts on the part of lumbermen to force an artificial level of prices. Lumbermen themselves have not profited generally, and have often suffered severely from the instability of conditions within the industry; while the public can only view with foreboding the gross waste in lumbering operations, and the failure of those within the industry to provide for its future maintenance.

THE QUESTION OF REMEDIES

The question of remedies to be adopted will hinge largely on the question as to which of the difficulties suggested is deemed most important. If the principal difficulty is found in the efforts of the lumbermen to fix prices, the question of an appropriate remedy will involve mainly a consideration of trust regulation. For two reasons, however, this aspect of the problem will not be considered here. In the first place, the question of trust regulation is far too broad to be given adequate attention within the scope of this volume; and, in the second place, since consumers have suffered little in the past, it seems that the question of remedy may safely be left to the future, if it ever becomes an acute problem.

The unfortunate situation of some of the lumbermen during a large part of the past decade seemed to demand more attention than it ever got; and a few years ago the Forest Service, in coöperation with the Bureau of Corporations, and later with the Trade Commission, undertook a study of conditions. Their report,[50] completed in 1916, called attention to the depressed situation of the lumbermen, and suggested the following general remedies: first, adequate capital, better financial backing, and better methods of accounting;[51] second, more efficient equipment and technical methods; third, better merchandizing of the product; and fourth, a more efficient and economical use of raw material. The details of these recommendations lie outside the scope of this work, but it is interesting to note that the report advocated the publication of current prices—actual prices, not list rates or quotations; recommended a better adjustment of the lumber cut to demand, not through curtailment by joint agreement, but through curtailment by the operators individually, each following the policy dictated by his own costs, available markets, and other business circumstances—whatever that may mean—and even approved of the selling agency in domestic trade, and of some form of coöperative selling organization for foreign trade.

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[49] Kellogg and Ziegler, "The Cost of Growing Timber," Pub. by *Am. Lumberman*, 1911.

[50] "Some Public and Economic Aspects of the Lumber Industry": Report No. 114, Dept. of Agr.

This report was not off the press before the conditions it deplored were completely changed, and the lumber industry was again enjoying one of the greatest "booms" in its history. At this time (1919), this "boom" is still on, and there is no present necessity for lavishing sympathy on the lumbermen. The suggestions for promoting stability in the industry are still pertinent, however, for the lumber industry, like the steel industry, has always tended to be either "prince or pauper."

Regarding the waste of lumber, it may be said that waste will prevail as long as timber has a low value, unless the government adopts a policy of supervising the cut on private lands. Probably the government will do this ultimately, and it can hardly do it too soon, but it will take some time to educate lumbermen and the public generally to the necessity for such a step.

GOVERNMENT REGULATION OF LUMBER PRICES

Government regulation of lumber prices has been advocated, on the one hand by lumbermen, on the ground that it would probably assure them a better price than they have usually received under a régime of competition, and on the other hand by certain publicists, notably by President Charles Van Hise of the University of Wisconsin, on the ground that such a policy would permit lumbermen to enjoy the benefits of coöperative action, and at the same time would protect the public from monopolistic exaction.[52]

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[51] *Am. Lumberman*, Jan. 1, 1916, 26; Jan. 29, 1916, 1; Apr. 8, 1916, 26.

The fact that some lumbermen have been willing to have the government step in and regulate prices, indicates clearly their sincerity in asserting that they have not been making a reasonable profit. Even the attorneys for the National Lumber Manufacturers' Association, in their brief before the Federal Trade Commission in 1916, asserted that the lumber industry would welcome government *observation*, or even government *regulation*, if deemed expedient.[53]

It is true that government regulation of prices is not the most important item in the proposal of the lumbermen, or of Dr. Van Hise. They are primarily interested in so amending the anti-trust laws as to permit more effective coöperation; but it seems inevitable that if the present competitive system is to be seriously altered, some form of government regulation of prices must be adopted.

The idea of price regulation, perhaps by means of a commission, seems attractive in many ways. It has a directness, a finality, an apparent simplicity even, which presents a strong appeal to certain minds. It is perfectly conceivable, too, that if the government is to engage in the regulation of prices at all, lumber prices might be as good a point of attack as any. The industry is based on a natural resource, and is fairly well centralized. It is true that considerable difficulty has been encountered in fixing satisfactory standards of some woods, but this difficulty would be met with in any industry. Finally, the cost of production, as far as that might enter into the

[52] *Am. Lumberman*, Aug. 28, 1915, 32; Sept. 25, 1915, 35; Nov. 6, 1915, 32: *Proceedings*, National Lumber Manufacturers' Assoc., 1916, 27. In the *American Lumberman* of December 22, 1917, the lumberman's attitude toward anti-trust activity is well expressed: "Incidentally, it might be well to call the attention of the state authorities to another very suspicious circumstance, in connection with the sale of lumber. One would naturally suppose that under free competitive conditions it would be sometimes sold by the thousand feet, sometimes by the cord, sometimes by the pound, sometimes by the bushel, and in occasional cases, by the lineal foot and yard. Instead, it appears to be almost universally sold upon a single standard of measure, per thousand feet board measure, and the buyer who wishes to buy according to any other standard of measure is thereby limited in his ability to purchase. This seems to have been overlooked and should at once be investigated and corrected."

[53] Brief on Behalf of the Lumber Manufacturers' Association, May, 1916, 13.

fixing of price, would be as easily determined for lumber as for almost any product.

A thorough and exhaustive criticism of government regulation of prices would lead beyond the scope of this book; but it will be appropriate to point out some of the difficulties in the way of such a scheme. In the first place, there would be the difficulty of securing a commission of well-trained men, the difficulty of avoiding too great a representation of politicians, such as cheapened the quality of the work done by the Federal Trade Commission. In the second place, and most important, there would be the difficulties connected with the determination of prices, and the first question would be as to the basis upon which prices should be established. A number of items would have to be considered—cost of labor, logging and milling equipment, original cost, interest charge and depreciation, fire protection and taxes. Perhaps the most important item, and the most difficult to work out, would be the value of the standing timber. It is difficult to find any satisfactory basis for the determination of lumber prices without taking into consideration the value of the standing timber, and yet that involves a suggestion of a logical absurdity, a circle of reasoning—to fix a price schedule on the basis of the present value of standing timber, when the value of the standing timber is dependent on the prices fixed. In the case of joint products, special complications would arise. For instance, the yellow pine forests of the South produce turpentine and lumber. Hemlock is valuable for its bark as well as for its wood. How should the price of the lumber be determined with relation to the other products? Some mills produce different kinds of products—lumber of many kinds and grades, shingles or lath, and perhaps excelsior. How much of the fixed charges and how much of the operating expense should be attributed to each product?

It might sometimes be difficult to adjust the price of different kinds of woods so as to do justice to each section of the country. As long as there is competition between different sections of the country, this is regulated, but if once this competition were eliminated, it might be very difficult to find a satisfactory basis for the determination of relative values in the various markets of the country.

It is possible that price regulation by a commission might result in an increasingly rapid destruction of our remaining forest resources.

If the commission established a certain level of prices, and then adhered to those prices in spite of the decreasing supply and increasing demand for timber, it would be encouraging rapid exhaustion of the supply. There would be no increase in price to discourage consumption. If, on the other hand, the commission were to increase the price as rapidly as competition would cause it to rise, there would be no particular reason for the existence of the commission. If a price-regulating commission were to try to keep lumber prices down, it would remove one of the chief incentives owners now have for preserving their timber. The expectation of a future rise in stumpage values is one of the reasons why many timber owners are not clearing their land as rapidly as possible, and this incentive would be removed by keeping lumber prices stationary.

These are only a few of the difficulties involved in government regulation of prices. Detailed consideration of that policy would lead beyond the proper scope of this book, but it has seemed appropriate to point out a few of the difficulties in the way of such a scheme, just to bring out the appropriateness of another policy—increased government ownership of timber lands.

INCREASED GOVERNMENT OWNERSHIP OF STANDING TIMBER

major thesis

An increase in government ownership is one remedy which will prove helpful, whatever our view of the situation. It will obviate the fear of artificial price control, will insure stability in the lumber market, reduce waste to a minimum, and provide for proper reforestation. The present unsatisfactory conditions in the lumber industry are an inevitable result of the policy of private ownership and exploitation which the government followed previous to the adoption of the forest reserve policy in 1891; and the remedy for these ills is to be found in a return to the policy of government ownership. The wisdom—perhaps we might almost say the *necessity*—of government ownership, is the great outstanding lesson to be gained from the study of the United States Forest Policy as outlined in the preceding chapters. Almost all of the advanced countries of the world have found it necessary to take over the management of their forests; and the United States must eventually enlarge her field of activities along this line.

Just how far and how fast the government should go in enlarging its forest domain, is a question which cannot be answered easily. Under the Weeks Law, the government is already buying up land slowly, in some instances even virgin timber land, but that act does not look to any general scheme for the purchase of valuable forest land, and it is unlikely that the government will enter upon such a policy until there is a clear and urgent need for it.

There are some regions where the government might even now extend her national forests to advantage. Some of the less accessible timber of the Northwest should perhaps be bought up. Much of it is in the vicinity of the national forests and could be cheaply protected and administered as additions to them. There are, for example, some 10,000,000,000 feet of privately owned timber on the headwaters of the Columbia in Idaho and Montana, which cannot be reached within the present range of logging costs in that region. The more accessible and high-priced timber in the pine belt of California is sufficient to supply its manufacturing industry, including any increased output that can be reasonably anticipated, for at least thirty or forty years; and there is left 48,000,000,000 feet of less accessible privately owned timber in the higher mountains, which by location is a reserve for the future. Many other billions are similarly located back in the Cascades of Oregon and Washington, and in various regions of the West. The recovery of such timber lands would be wise from the point of view of the public, and perhaps not disadvantageous from the point of view of the present owners, for the carrying of such timber for two or three, or even four decades, until exhaustion of other supplies has called it into the market, will involve a very heavy outlay, and will not likely prove profitable, unless lumber prices rise extremely high.

Our national forests will of course play a more important part in the future than they do now. At the present time they are much less important than their area would indicate, because only part of the land is timbered, and the timber included is generally of poor quality and inaccessible. The Forest Service is handling the timber very conservatively, however, cutting less than the annual growth, so that the amount of government timber is increasing; while the privately owned timber is being cut at a very rapid rate. Furthermore, as already pointed out, the government is slowly taking over tracts of land under the Weeks Law. Thus the relative importance of publicly owned timber will gradually increase.

CHAPTER XIII

CONCLUSION

The history and results of the United States forest policy have now been discussed in considerable detail. A rather depressing story it is, too, a story of reckless and wasteful destruction of magnificent forests, and of flagrant and notorious theft of valuable lands—a story that Americans will follow with little pride.

The gradual growth of an interest in the preservation of our forests has been traced. Such an interest is not a development of the first decade or two only, nor even of the past half-century. Anxiety for the future timber supply arose even in colonial times, and expressions of concern were voiced at various times throughout the later history of the country. The idea of conservation gained momentum most rapidly, it is true, during the eighties and nineties; and the "conservation movement," in its present scope, took form during the early years of the present century, under the leadership of Pinchot.

EUROPEAN INFLUENCES IN THE CONSERVATION MOVEMENT

It is notable that from the earliest times down to the present, interest in the conservation of our forests has been fostered largely by men of foreign birth or training. Thus William Penn and the early colonial governors who evinced interest in the matter were reared in Europe and had European traditions regarding forests. F. A. Michaux, who wrote in 1819, was a Frenchman, and many of the others who later became interested in this question had studied or at least traveled in Europe. Carl Schurz and B. E. Fernow, two of the heroic figures in the conservation movement, were Germans. Gifford Pinchot and Charles Walcott studied forestry in Europe; and Theodore Roosevelt was strongly influenced by his close contact with European thought.

THE ATTITUDE OF CONGRESS

In the study of the forest policy, nothing stands out more prominently than the unwise position Congress usually took. Of the important timber land laws passed in the half-century during which our forests were disappearing or passing into the hands of private individuals, only two—the Forest Reserve Act of 1891, and the act of 1897—stand out clearly as examples of intelligent legislation; and the first of these was secured because Congress did not get a chance to quash it, while the act of 1897 was drawn by a "theoretical" scientist, and pushed through Congress on an appropriation bill. During the seventies, eighties, and nineties, timber-steal measures of almost any kind could get a favorable hearing in Congress, while conservation measures were promptly eliminated from the calendar. The insistent call of department officials and others for better legislation seldom elicited a favorable response, while the complaints of timber trespassers who got caught in their illegal operations frequently received a sympathetic hearing, and sometimes even legislative relief. For the fact that the United States finally got some national forests, with a scientific system of administration, credit is due, not to the wisdom of our national legislature, but entirely to administrative officials—Schurz, Cleveland, Sparks, Walcott, Fernow, Bowers, Pinchot, Roosevelt, and others; and these men had to fight Congress at almost every step.

The attitude of Congress was due, in the first place, to the inability of most of the members to understand the necessity of forest reserves. Most congressmen are "practical men"—lawyers, farmers, merchants, successful business men—and not men of broad education and scholarship. Few of them knew anything of the history of forestry in European countries, in some of which the policy of private ownership of timber lands had been tried and abandoned. It was the "mad theorists" who first urged the establishment of reserves; and, after the reserves had been established—by the President, not by Congress—some of the men in Congress began to understand the principles underlying the new policy. Probably at the present time a majority of them understand why timber land should be owned by the government, but that was not true twenty years ago.

A second reason for the failure of Congress to adopt a more intelligent policy regarding the timber lands, is the inability of Congress to pursue an intelligent policy regarding anything. Congress is not usually interested in intelligent action, but is interested rather in trading votes, and talking to the "home folks" in anticipation of the next election.

To what extent dishonesty and corruption have been responsible for the attitude of Congress, it is impossible to say. The writer has no disposition to attribute unworthy motives to most members of the national legislature, however unwise their course may now seem. Yet there is no doubt that if the whole story of forestry legislation could be told; if all the inner secrets of timber statesmen could be revealed; if all the collusion and vote trading with the railroads and with other powerful interests could be brought to light, and all the lobbies and secret conventions and bribe funds and committee machinations could be exposed, it would make very interesting reading. This is true not of the Federal Congress alone, for in some of the states matters were worse. Politicians in Wisconsin still speak of the "saw log dynasty" which controlled the politics of the state for nearly a generation. Recently a student at the state university of one of the other Lake states wrote a thesis on the history of the pine lands, which he did not dare publish because of the light it threw on members of the state legislature. The history of the wild lands of Maine would doubtless make interesting reading if it could be written in full. It has been stated that large tracts of timber lands in Maine were acquired by men who held state offices at the time, and that the influence of this timber ownership extended even to some of the members of the state supreme court; although the writer is unable to vouch for the latter statement.[1] New Hampshire and New York have no reason to be proud of their records in dealing with their timber lands; and this is true of most of the states which had any considerable areas of such lands.

THE ETHICS OF TIMBER STEALING

Perhaps it may be worth while to point out once more that it would be easy to exaggerate the moral turpitude involved in stealing timber lands, or in passing a law to facilitate such stealing. Speculation and frauds have always characterized the frontier; and of course moral values have corresponded to the environment. The men who could seize the largest amount of natural resources and waste them most rapidly were not infrequently regarded as doing most for the "development of the West." The writer recalls, in this connection, a conversation he once had with the editor of a Portland (Washington) newspaper regarding the conviction of Senator Mitchell for complicity in land frauds. This editor admitted that Mitchell was guilty, but asserted that the prosecution of Mitchell for so common an offense was "the most brutal outrage ever perpetrated on a mortal man." It will be remembered that Binger Hermann was elected to Congress less than a year after he had been dismissed from the Land Office.

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[1] *New England Magazine*, July, 1907, 515.

Underlying to some extent the exploitative attitude of the West was the idea that resources which could be appropriated, in some way pried loose from the public domain, belonged to the West; while those which remained under Federal control belonged to the East. This explains why many men who, from the point of view of straight-laced conservationists, should have been socially ostracized or put in prison, have been regarded as "leading citizens" in some of our western states. They have "led" merely in the work of appropriating Federal lands—"saving" it for the West.

The West has always been too much saturated with the idea of rapid exploitation. The people saw the apparently unlimited lands and other resources awaiting development; and entered upon their task with the energy which has generally characterized the frontier. They were, as indeed they still are, "boosters" of the most enthusiastic brand, partly because optimism was in the very air, and partly because many of them had appropriated some of the resources, and were engrossed in an effort to get more, not always with the intention of using them to establish homes, but rather in the hope of selling to someone else at a profit. That was one reason why they opposed any policy which seemed to discourage the coming of people from farther east. Another reason was of course that they realized, as business men generally do in all sections and in all countries, that a growing population increases the value of real estate and other limited natural resources, and so increases the wealth of those who "got there first." Like business men everywhere, those who got there first were inclined to regard their own interests as identical with the interests of the people as a whole. The people of the West have not been alone in placing too great an emphasis on increasing population, growing cities, and rising real estate values; but they have represented the most extreme development of this common error.

The characteristics of many of the western people, as of the frontiersmen at all times, were such that they would not possibly have been friendly to the reservation policy at first. Their boundless optimism made them unreceptive to predictions of future danger, while a certain shortsightedness made them generally slow to consider anything but the very near future. Their individualism and dislike of restraint naturally made them hostile to the bureaucratic government of the forest reserves; and the goodness or badness of that government was not in their eyes an important matter. Many western people wanted to govern themselves; and a corrupt and inefficient government has not infrequently suited them quite as well as any other. Their lack of respect for experience, their deep-rooted dislike for experts and "theorists"—taking the form of a contempt for all special training or learning—would have made them hostile to the administration of the forest reserves, no matter how efficient and intelligent that administration might have been. The fact that, by the elimination of land stealing and other frauds, and by the avoidance of the wasteful destruction and blasted barrenness which goes with unregulated private exploitation, the reservation policy presented certain ethical and aesthetic gains, would not have seemed very important to a people who pride themselves on being extremely "practical"—a people who really are practical and materialistic to the extent of overemphasizing the cash side of most social and economic questions.

In further extenuation of the western attitude toward conservation, it must be granted that conservation has been something of a fad and a hobby with some of its advocates. Pinchot once stated that one of the beauties of "conservation" was that no one could say he was opposed to it. As President Taft once said: "The subject of conservation is rather abstruse, but there are a great many people in favor of conservation, no matter what it means."[2]

[2] *Outlook*, May 14, 1910, 57.

In the question of the conservation of any natural resource, there is usually a problem of balancing benefits against costs; but some advocates have been insistent on the conservation of all things, and almost regardless of cost. The Americans have been a wasteful and extravagant people in their use of all natural resources; but there are circumstances under which this wastefulness was not only inevitable, but even wise. The people of America could not possibly have treated their forests with the same care that Europeans have shown, for there were too many forests and too few people.

Just as it would be easy to judge too severely of the moral obliquity involved in the attitude of the western timbermen and congressmen, so it would be possible to exaggerate the virtue involved in the efforts of the eastern men to conserve the public timber. In the early history of the country, the eastern men wanted to keep the public lands as a source of revenue, and in later times some of them desired to preserve the public timber in order that the whole country, but especially the East, might have a future supply of timber. The East was of course the section which would first feel the pinch of scarcity. As Representative Martin of Colorado once said: "I notice that the less public domain and the less natural resources a member has in his state, the more enthusiastic he is about conservation."[3] Perhaps there was in the attitude of some of the eastern men an element of selfishness not altogether unlike that which characterized the West. This must not be construed as denying or belittling the truly unselfish and heroic work of many of the leaders in the conservation movement.

It may be worth while to point out that the wasteful exploitation of the forests, unfortunate though it seems in many ways, provided consumers with very cheap lumber for the time being. In the seventies and eighties, the white pine of the Lake states was being cut with almost no regard for the future; but, while this meant scarcity and high prices in the future, it meant cheap lumber of the finest grade for some of the early settlers who were building homes on the prairies of the Middle West, many of whom surely had sufficient difficulty securing the comforts of life.

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[3] *Cong. Rec.*, Apr. 7, 1910, 4376.

WASTE AND THEFT OF OTHER RESOURCES

Forests are not the only natural resource that has been stolen and pillaged and wasted in this country. All other natural resources have been treated in much the same way—coal, oil, gas, iron, copper, water power, and the tillable soil itself. Wherever a valuable resource is given away, or sold for far less than its real value, it is, as Professor Ely has said, merely "subsidizing the speculator, endowing monopoly, and pauperizing the people." The anthracite monopoly of Pennsylvania controls one valuable resource, the Standard Oil Company controls the marketing of another; a few gas companies control what is left of our natural gas; and all these monopolies may be traced to the unwise policy which has been pursued by the Federal government, and by the states which had valuable resources under their control. Monopolies are not the only result of our unwise policy of alienation, however, nor even the worst result. The criminal and unnecessary waste with which some of our resources have been exploited is even more unfortunate. It has been estimated that we have wasted, rendered inaccessible, as much coal as we have taken out of the ground, and the waste of natural gas has been relatively even worse.

It is true that some of this apparent waste has been unavoidable, in a country where labor is so expensive and resources so cheap; but if the reservation policy had been applied, not only to forest lands, but to all mineral deposits, some of this waste could have been eliminated. The Federal government, and those states which had valuable resources, should have alienated only one thing—the surface of the soil, of ordinary agricultural lands. The policy of reservation should have been applied to everything else, not only to forests and mineral resources, but, in some measure at least, to irrigation lands, swamp lands, and to arid grazing lands. This would have delayed exploitation or development, but it would in the long run have resulted in a saner and healthier development of the country.

It may be noted that Congress recently took a very unwise step in dealing with the grazing lands, by passing the Stock Raising Homestead Act of 1916, which provides for the entry of grazing lands in tracts of 640 acres. The act has already resulted in the alienation of large areas of the public domain, largely to speculators, who take up land with the intention of selling later to cattle companies. It is unlikely that many "homes" will ever be established under this act, and the government will lose control over one more resource.[4]

A RATIONAL POLICY FOR THE FUTURE

It is not yet too late to adopt a rational policy with regard to the remainder of these natural resources. The first step should be a careful classification of all public lands, and only such as are fit for agriculture should be alienated. There are large areas of coal, oil, and phosphate lands in the West, some of them already withdrawn. All these should be permanently reserved, as far as the mineral deposits are concerned. Where the soil is fit for farming, it should be turned over to settlers, with a reservation to the government of everything below the surface.[5]

The Federal government should retain control of the swamp lands and irrigation lands which have not already been alienated. It has been demonstrated that irrigation is in some cases a work for the Federal government, and this is true also of drainage. The engineering problems involved are often interstate in their scope, and entirely too large for individual enterprise. Furthermore, even if private individuals or corporations were financially strong enough to undertake large irrigation or drainage enterprises, it would not be wise to give them control over thousands, perhaps hundreds of thousands, of acres of land occupied by tenants. Just how much control the Federal government should retain over lands which have been irrigated or drained, is not a question for this treatise; but the work of getting the land ready for settlement is in many cases a work for the government, and probably it should always retain some control over such lands.

If the need were for immediate development and exploitation of the resources of the public domain, there might be a question as to the wisdom of such sweeping application of the reservation policy; but the need is not for rapid settlement and rapid exploitation. Exploitation of our resources has proceeded with sufficient rapidity. The need is for greater sanity and intelligence and foresight than we have displayed in the past. The United States is gradually developing the knowledge and understanding necessary for an intelligent solution of her public land problems; and even if there were any doubt that the reservation policy will prove to be the ultimate solution, it has the supreme merit of postponing an irrevocable decision until a future time, when the nation is older and wiser. Lands which are reserved can be turned over to private ownership at any time. Lands which are once alienated are irrevocably beyond control, and beyond the reach of any wise and beneficent laws or policies that our developing intelligence may bring forth. Pinchot has put the problem clearly: "This nation has, on the continent of North America, three and a half million square miles. What shall we do with it? How can we make ourselves and our children happiest, most vigorous and efficient, and our civilization the highest and most influential, as we use that splendid heritage? . . . Above all, let us have clearly in mind the great and fundamental fact that this nation will not end in the year 1950, or a hundred years after that, or five hundred years after that; that we are just beginning a national history the end of which we cannot see, since we are still young. . . .

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[4] *Stat.* 39, 862.

[5] *Bul.* 537, U. S. Geological Survey.

"On the way in which we decide to handle this great possession which has been given us, on the turning which we take now, hangs the welfare of those who are to come after us. Whatever success we may have in any other line of national endeavor, whether we regulate trusts properly, whether we control our great public service corporations as we should, whether capital and labor adjust their relations in the best manner or not—whatever we may do with all these and other such questions, behind and below them all is this fundamental problem, Are we going to protect our springs of prosperity, our sources of well-being, our raw material of industry and commerce, and employer of capital and labor combined; or are we going to dissipate them? According as we accept or ignore our responsibility as trustees of the nation's welfare, our children and our children's children for uncounted generations will call us blessed, or will lay their suffering at our doors."[6]

[6] *Farmers' Bul. 327.*

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INDEX

Advertising by the Forest Service, 285, 287, 288
Advice to private timber owners, 154, 299, 300, 301
Agricultural college scrip, 48
Agricultural lands, inclusion in forest reserves, 164-168, 255-261; in the Southern Pacific grant, 250, 251
Alaska, game in, 304; homestead law in, 180
Alaska forests, attacks upon, 205
Alien government, opposition to, 282
Allen, Senator, 131
Allison, Senator, 136, 139, 181
Amalgamated Copper Company, 320
American Association for the Advancement of Science, 34, 35, 42
American Forestry Association, 95, 120
American Forestry Congress, 95
Ammons, E. M., 282, 289
Andrews, C. C., 32
Anti-conservation activity, 67, 68, 77, 78, 88, 89, 130, 136, 164-205, 228, 229, 233, 234, 241, 242, 256-258, 289-290
Anti-trust activity of the government, 339, 347
Appalachian Mountains, forest reserves in, Ch. VI
Appropriations for forest protection, 41, 100, 107, 141, 154, 155, 158, 159, 243
Arbor day, 29, 30, 95, 146, 147
Arid lands, trees for, 310
Arizona, forest reserves in, 179; lieu selections in, 182, 183; timber lands in, 54
Arkansas, timber lands in, 54
Attacks on the forest reserves, 130-141, 193, 194, 196-199, 201 et seq., 289, 290, 297
Austin, Representative, 211
Averill, Representative, 60
Bailey, Representative and Senator, 201, 208, 244, 298
Ballinger-Pinchot controversy, 150, 201-205, 295
Bartholdt, Representative, 36
Beck, Senator, 104-106
Bell, Representative, 125, 138, 242
Bennett, G. G., Representative, 89
Bennett, Representative from New York, 205, 285
Benson, John A., 186, 187
Berry, Senator, 101
Beveridge, Senator, 196, 198, 208
Bliss, C. N., Secretary, 176, 197, 198, 226, 231 n., 240
Boles, Representative, 50
Bonynge, Representative, 174
Booher, Representative, 201, 256
Borah, Senator, 201, 205, 210, 255, 257, 273, 294, 298
Boutwell, Senator, 52, 53, 60, 112
Bowers, E. A., 95, 111
Bowers, Representative, 130
Bradley, Representative, 211
Brandegee, Senator, 209, 210
British forest policy, early, 19, 20
Brown, Senator, 43, 51
Browne, Representative, 78
Brownlow, Representative, 209, 211
Bryan, Representative, 204, 294
Burdett, Commissioner, 58
Bureau of Corporations, Report on the Lumber Industry, 315, 316
Bureau of forestry, 155
Burned timber, sale of, 236, 237
Burton, J. R., Senator, 208, 209
Burton, Theodore, Senator, 219
Butterworth, Representative, 112

California, forests in, 54; early forestry legislation in, 34; frauds in, 47, 74, 224, 320; interest in forestry, 97; not

hostile to reserves, 295; timber ownership in, 319, 331
Cameron, Senator, 112
Caminetti, Representative, 122
Canada, early interest in conservation, 20, 96, 97; forest policy, 59; migration to, 255
Canadian Conservation Commission, 152
Cannon, Joseph, Representative, 138, 156, 181, 210, 211, 218
Cannon, Senator, 140
Carnegie, 151
Carter, Senator, 131, 159, 173, 174, 197, 199, 201, 210, 233, 271
Castle, Representative, 137
Chaffee, Delegate and Senator, 57
Clark, Senator, 131, 133, 159, 174, 210, 219, 231
Clark, Representative, 205
Clayton, Senator, 50
Clayton bill, 50-53
Cleveland, President, 64, 87, 106, 120, 121, 129, 132, 137, 184, 228
Climate, forests and, 28, 30, 31, 32, 33, 36, 93, 109 n., 310, 311
Clunie, Representative, 114
Coal claims in Alaska, 150, 202, 206
Coal, conservation of, 149, 375, 376
Coal lands, withdrawal of, 270, 271
Cockrell, Senator, 181
Cocks, Representative, 275
Coffeen, Representative, 123, 125, 242
Cole, Senator, 43
Colonial timber regulations, 20, 21
Colorado, early forest legislation in, 34; forests of, 54, 65; frauds in, 81; hostile to reserves, 295; interest in forests, 97; reserves in, 120
Competition among lumbermen, 345
Competition of woods and substitute materials, 344, 345
Concentration in the ownership of timber, Ch. XI
Conference of Governors, 151
Conger, Representative, 89
Congress, and conservation, 40, 88, 90, 100, 102, 105, 108, 114, 116-118, 182, 203, 227-229, 240, 242, 243, 249-252; and the National Conservation Commission, 153; incapacity of, 297, 370, 371
Connecticut, forest legislation in, 34; state forest reserves in, 145
Conness, Senator, 60
Conservation, as an issue, 39; cost of, 280; meaning of, 373, 374
Conservation movement, 39, 149, 369
Conspiracy to defraud, difficulty of proving, 245
Converse, Representative, 89, 112
Cost of buying timber lands, 216
Cost of national forest management, 284
Crumpacker, Representative, 216
Cummins, Representative, 257
Currier, Representative, 209, 210
Curtailment campaigns among lumbermen, 350-353
Cypress, ownership of, 322

Delano, Secretary, 59
Denby, Representative, 248
Dendrological investigations, 308
Depew, Senator, 163, 208
Desert Land Act, 49, 99
Destruction of timber, 26, 65, 81, 82, 84, 185, 238, 239
Deuster, Representative, 112
Development of the West, interference with, 131, 135, 136, 166, 254, 255
Dies, Representative, 256
Discrimination against the West, 135, 136, 262, 271, 272
Division of Forestry, 155
Dixon, Representative, 168
Dolliver, Senator, 196, 198, 275
Dolph, Senator, 78
Donaldson, "Public Domain," 98, 99
Doolittle, Representative, 123, 184
Dovener, Representative, 211
Drummond, Commissioner, 32, 44
Dubois, Senator, 194, 195, 199, 231, 294
Dunnell, Representative, 42, 44, 60, 77, 89, 117

Early conservation sentiment, 26-31
Early settlers and the forests, 19
Eastman, Representative, 41

Edmunds, Senator, 51, 68, 69, 104, 105, 112, 113, 114
Education in forestry, 147
Education, land grants for, 47, 48, 330
Educative work of the Forest Service, 288, 299-302
Elkins, Senator, 211
Ely, R. T., Professor, 375
Englebright, Senator, 201, 274
Erosion and forest conservation, 138, 151, 159, 212, 214
Extravagance of Forest Service, alleged, 201, 205, 284-292

Fall, Senator, 298
Fernow, B. E., 94, 95, 109 n., 111, 122, 142, 369, 370
Fitzgerald, Representative, 197, 256, 285
Flint, Senator, 199, 265
Floods, forest preservation and, 215
Florida, early reserves in, 23, 24; forests of, 24, 46, 54; swamp lands in, 46; timber ownership in, 322, 330
Floyd, Representative, 201
Foraker, Senator, 248
Fordney, Representative, 156, 181, 248
Forest conservation and irrigation, 138, 151, 159
Forest fires, 169; early laws against, 21; improvement in laws, 161, 162; need of legislation, 91; protection against, 221, 302; state appropriations, 147; state laws, 97
Forest Lieu Act, 139, 140, 176-190, 292, 331
Forest products, investigations in, 311-314
Forest Reserve Act, 109-118; partial repeal of, 196-201
Forest reserves, creation of, 120, 129, 161, 191, 200; early advocates of, 110; first bill for creation of, 45
Forest Service, criticism of, Ch. IX
Forest Service, work of, Ch. X
Forestation, work in, 309, 310. See Timber Culture Act
Forestry associations, 34, 95, 148
Forestry journals, 95, 148
Fort, Representative, 45
Francis, Secretary, 130
Frauds, 47, 81, 320; encouragement to, 101, 102; need of a law punishing, 245; under the Forest Lieu Act, 179, 185-190; under the Free Timber Act, 65, 66, 238, 239; under the mining laws, 265, 266; under the Timber and Stone Act, 74-77, 165 n., 224-226
Free timber, 133, 141, 159
Free Timber acts, 55-58, 62, 65-69, 238-243
French, Representative, 167
Fulton, Senator, 159, 188, 189, 190, 197, 199, 210, 241, 242
Future, a rational policy for the, 376, 377

Gallinger, Senator, 209-211, 213, 214, 248, 257
Game protection, 302-305; opposition to, 134, 272, 273
Garfielde, Delegate, 60
Gibbs, Wolcott, 129
Gibson, Senator, 230
Gillett, Representative, 213
Glavis, 202, 203 n.
Gorman, Senator, 133, 136, 139
Government ownership of standing timber necessary, 366, 367
Government regulation of lumber prices, 363-366
Graves, Forester, 277, 286, 295
Gray, Senator, 134, 136
Grazing fees, should be increased, 291, 292
Grazing in forest reserves, 121, 130, 157, 159, 160, 167-174, 193, 262-264
Grazing interests, assistance to, 305, 306, 308
Greeley report on the lumber industry, 300
Guernsey, Representative, 211

Haldeman, Representative, 42
Hale, Senator, 153, 181, 201
Hamilton, Representative, 205, 285
Hansbrough, Senator, 163, 230
"Hardships of the settlers," 69, 89, 132, 136, 165, 197, 233, 234, 260
Harris, Senator, 43

Harrison, President, 69, 92, 114, 120, 241
Hartman, Representative, 124, 125, 137
Hatch, Representative, 112, 113
Haugen, Representative, 205, 285
Hawley, Senator, 104, 105, 136
Hawley, Representative, 201, 256, 275, 277
Hayes, President, 38
Hazelton, Representative, 89
Health, forests and, 30, 93, 94
Heitfeld, Senator, 173, 194
Hemenway, Senator, 159, 160
Heney, F. J., 187
Herbert, Representative, 89
Hermann, Binger, 123, 124, 178, 181, 182, 182 n., 186-189, 229, 372
Herndon, Representative, 42
Hewitt, Representative, 50
Heyburn, Senator, 159, 172, 182, 194, 196, 199, 201, 210, 234, 235, 256, 257, 260, 272, 276-278, 285, 289, 292-296, 298
Hill, J. J., 151, 289, 298
Hitchcock, Secretary, 66 n., 157, 171, 178, 183, 191, 197, 198, 226, 229, 232 n., 233, 234, 242
Hitchcock, Senator, 43
Hitchcock, Representative, 274
Holman, Representative, 51, 52, 67, 73, 78, 113, 116, 122
Homestead Act, Commutation, 48, 56; frauds under, 80; amendment, 99
Hostility to national forests in recent years, Ch. VIII, Ch. IX
Hough, F. B., 30, 34; "Report on Forestry," 43, 95, 97
Houk, Representative, 241
Howe, Senator, 53
Hubbard, Representative, 211
Hull, Representative, 89
Humphrey, Representative, 201, 203, 204, 205, 277, 279, 289, 292, 293, 294
Hyde, F. A., frauds, 186, 187

Idaho, timber land frauds, 84, 259; timber ownership in, 320; timber purchase in, 367
Indian lands, forests on, 78 n., 106, 112
Indiana, state forest reserves in, 144
Inefficiency of early forest administration, 190
Ingalls, Senator, 51, 104
Inland Waterways Commission, 151
"Insolvency" of the reserves, 284-292
Instability of the lumber market, 354, 355
Investigations in forestry, 42, 108
Investigative work of the Forest Service, 307-314
Irrigation, and forest conservation, 138, 151, 159

Jenkins, Representative, 242, 248
Johnson, Representative, of California, 57
Johnson, Representative, of Washington, 202, 205, 260, 277, 290
Jones, Senator, 50
Jones, Representative, 156, 182, 193
Joseph, Representative, 113

Keifer, Representative, 248, 274
Kelley, Representative, 60
Ketchem, Representative, 89
Kirkwood, Secretary, 66
Knowles, Representative, 137

Lacey bill, the, 166-168
Lacey, Representative, 131, 138, 163, 172, 228, 229, 233
Lafferty, Representative, 298
Lake states, timber ownership in, 318, 319, 322-324, 329, 331; timber protection in, 41
Lamar, Secretary, 64, 87, 110
Lamar, Representative, 211
Lamb, Representative, 275
Lamoreux, Commissioner, 120, 121, 228
Large timber holders, Ch. XI; factors augmenting power of, 324-327
Lever, Representative, 210
Lindbergh, Representative, 211
Little, Representative, 244
Lodge, Senator, 159, 160
Louisiana, timber lands in, 54; timber ownership in, 322, 329; timber stealing in, 82
Lumber market, instability of, 354, 355

Lumber prices, government regulation, 363-366
Lumbermen's associations, 335 et seq.

McFarland, Commissioner, 87, 93, 110
McKenzie, Representative, 89
McKinley, President, 132, 161, 184, 208
McLaughlin, Representative, 279
McMillan, Senator, 108
McRae, 74, 117, 122, 126, 138, 181, 228, 282
McRae bill, the 122-128
Maginnis, Representative, 57, 60
Mann, Representative, 159, 160, 205, 274
Mantle, Senator, 131
Markham, Representative, 113
Martin, E. W., Representative, 167, 171, 256, 261
Martin, J. A., Representative, 201, 261, 267, 271, 272, 274, 275
Maryland, state forest reserves in, 144
Massachusetts, state forest reserves in, 144
Michigan, early conservation sentiment, 29, 33, 46; forests in, 29, 33; state forest reserves in, 145; swamp land grants in, 330; timber stealing in, 81
Military bounties, 49
Miller, Senator, 112
Mining in the forest reserves, 125, 126, 127, 130, 133, 137, 138, 264-266
Minnesota, state forest reserves in, 144, 145; frauds in, 80; railroad grants in, 54
Mississippi, timber lands in, 54; timber stealing in, 82
Mitchell, Senator, 104, 187-189, 241, 372
Mondell, Representative, 156, 157, 167, 174, 181, 182, 196, 197, 201, 237, 256, 261-263, 275, 282, 285, 294, 296, 298
Money, Senator, 275
Monopoly, alleged lumber, 334
Monopoly, possibility of a future lumber, 353
Montana, timber stealing in, 82, 84
Moody, Representative, 181, 209, 241
Moore, Representative, 205
Mormon church and forestry, 296
Morse, Representative, 274
Morton, Governor, 30
Mt. Ranier National Park, 183, 184, 292, 332
Municipal forest reserves, 145
Murdock, Representative, 204

National Conservation Association, 153
National Conservation Commission, 152, 227
National forests, safety of, 296-298
National Lumber Manufacturers' Association, 336
National parks and forest reserves, should be under same jurisdiction, 304
Naval reserves, 22-25
Navigability of rivers, and forest conservation, 212-214
Nelson, Senator, 153, 196, 236, 242, 257
Nevada, timber stealing in, 82
New Hampshire, state forest reserve in, 145; frauds in, 371
New Jersey, state forest reserve in, 145
New Mexico, timber lands in, 54; timber stealing in, 82
New York, conservation activity, 29, 33, 96, 97, 144; state forest reserves in, 111, 144; frauds in, 82, 371
Newlands, Senator, 154, 195, 199, 216, 231, 235
Noble, Secretary, 86, 111, 115, 120
North American Conservation Conference, 152
Northern Pacific Railroad, 178 n., 252, 253; lieu selections by, 184, 185; timber holdings of, 317-322, 328, 331; trespass by, 84, 85, 89

Oglesby, Senator, 51
Oil, conservation of, 149
Oil lands, withdrawal of, 271
Open price associations among lumbermen, 340, 350
Oregon, forests of, 110, 318, 319; forfeiture of railroad lands in, 246-252; hostile to reserves, 295; timber land frauds, 185-190; timber purchase in, 367
Oregon & California Railroad grant, 246, 247

Otis, Representative, 130
Overman, Senator, 209

Pacheco, Representative, 60
Pacific Northwest, timber ownership in, 318-324, 328, 329
Paddock, Senator, 92, 122
Page, Representative, 57, 60
Patterson, Senator and Representative, 57, 60, 80, 159, 197
Payne, Representative, 274
Payson, Representative, 78, 116
Pearson, Representative, 209
Penn, William, interest in forestry, 21
Pennsylvania, state forest reserves in, 144
Perjury, difficulty of punishing, 245
Perkins, Senator, 199
Perkins, Representative, 285
Permit Act, 239, 241, 242
Pettigrew, Senator, 108, 115, 116, 132, 133, 139, 140, 173, 180, 185
Pickler, Representative, 116, 123
Pinchot, Gifford, 122, 129, 141, 143, 149, 150, 153, 156, 158, 161, 172, 174, 175, 194, 196, 201-205, 227, 232 n., 254, 270, 282, 284, 288, 293, 295, 367, 370, 373, 377, 378
Platt, Senator, 173
Plumb, Senator, 92, 110, 115, 116
Poehler, Representative, 89
Political party platforms, 149
Pollard, Representative, 210
Pools in the lumber industry, 340
Portland, Astoria & McMinville Railroad, 249
Posterity, objection to saving for, 53, 271
Power, Representative, 229
Pray, Representative, 237
Predatory animals in forest reserves, 306
Preëmption Act, 48, 56, 79, 99
"Press bureau" of the Forest Service, the, 287, 288
Price regulation, government, 363-366
Prices, efforts by lumbermen to fix, 338-350
Pritchard, Senator, 208
Private ownership of standing timber, cost of, 357-359
Private timber owners, advice and assistance to, 154, 299-302
Profits of lumbermen, 354, 364
Profits of timber owners, 355, 358
Progressive party, 149, 201-205
Protection of forests, act of 1897, 133, 141; appropriations for, 41, 100, 107, 141, 154, 155, 158, 159, 243; difficulties in the way of, 84, 85, 90, 91; need of, 119-122; under Secretary Schurz, 40, 86
Public Lands Commission of 1880, 98, 99
Public Lands Commission of 1903, 150, 227, 264
Public Lands Convention at Denver, 174, 175
Public sale, 49, 56, 58, 59, 72, 99, 331
Puter, S. A. D., 187, 225

Quarles, Senator, 229
Quay, Senator, 69

Railroad Indemnity Act, 54, 55, 86
Railroad land grants, 53-55, 102, 104-106, 246, 253, 327-330
Railroads, tree planting by, 30, 37, 38, 149
Railroads, trespass by, 83
Range lands, conservation of, 149, 308
Ranger stations, objection to, 260, 261
Rawlins, Senator and Representative, 124, 125, 134, 140, 158, 173
Receipts from national forests, 284
Recreational uses of the national forests, 305
Redwood lands, 319, 320
Reeder, Representative, 236
Reforestation, 309, 310, 361
Remedies for present situation in the lumber industry, 362
Republican party, hostile to reserves, 201-205
Resources, withdrawal of other than timber, 270
Retailers of lumber, price activities among, 342

Richards, Commissioner, 150, 245
Road and school fund, from national forests, 273-276, 297, 298
Roads in national forests, 276, 278, 279
Robinson, Representative, 90, 237
Roosevelt, President, 147, 150-152, 156, 161, 172, 175, 188 n., 191, 194, 200, 201, 205, 227, 234-236, 270, 303, 369, 370
Ross, Senator, 43
Rucker, A. W., Representative, 201, 256, 262, 275
Rucker, W. W., Representative, 215
Ryan, Representative, 89

Sale of lands, 49-53, 58, 59, 99, 101, 331
San Francisco Mountains Forest Reserve, 179, 182, 183, 198
Sanders, Senator, 68-70
Sapp, Representative, 89
Sargent, Charles S., 108, 122
Sargent, Representative and Senator, 57, 60, 97, 108, 121, 129
Sayers, Representative, 139
Sayler, Representative, 60
Schools of forestry, 147, 148; efforts to secure land grants for, 108
Schurz, Secretary, 40, 64, 66, 76, 86, 89, 91, 93, 98, 100, 112, 369, 370
Scott, Representative, 210, 212, 218, 274, 275
Scrip, land, 49, 56
Senate, hostility to conservation, 137, 138, 141, 158, 197, 257, 258
Settlers in the national forests, value of, 280, 281
Shafroth, Representative and Senator, 156, 174
Sheep, grazing of, 168-175, 263
Sherman, Senator, 112, 113, 114
Ship timber, conservation of, 20
Shoup, Senator, 140, 173
Sibley, Representative, 41
Silvicultural investigations, 308-311
Simon, Senator, 241
Simpson, Representative, 123, 124
Sinnot, Representative, 251
Size of holdings and relative values, 324-326
Slater, Representative, 60
Smith, E. D., Senator, 215
Smith, Hoke, Secretary, 121, 128, 228
Smith, M. A., Senator, 167, 173, 241
Smith, S. C., Representative, 167, 197
Smith, W. I., Representative, 248
Smoot, Senator, 195, 199, 235, 255, 265, 294, 296
South, abolition of private sale in, 101; sale of lands in, 49, 50, 51-53
South Dakota, state forest reserves in, 145
Southern Pacific Railway, forfeiture of land grant, 246-252; timber holdings, 317-321, 328
Southern pine region, timber ownership in, 318, 323, 324, 331
Sparks, Commissioner, 72, 74, 87, 88, 110, 111
Speculation in timber lands, 332, 333, 355-357
Spooner, Senator, 69, 199, 208
Squire, Senator, 241
Stanley, Representative, 274
Starvation of animals on public ranges, 307
State conservation activity, 33, 34, 96, 97, 144-147
State conservation commissions, 152
State forest reserves, 29, 111, 144, 145, 216
State grants for education, 47, 48, 330
State land grants for forestry purposes, 246
State lands in the national forests, 281, 282
State timber culture laws, 37, 146
Stealing of timber, ethics of, 79, 371-374
Steele, Representative, 89
Steenerson, Representative, 205, 285
Stephens, Representative, 211
Stewart, Senator, 180
Stockmen, attitude of, 263, 264
Stone, Representative and Senator, 139, 205, 285
Streamflow, influence of forests on, 212-214, 310, 311
Sulzer, Representative, 275

Summer homes in the national forests, 305
Summer resorts in Appalachian Mountains, 213
Swamp land grants, 46, 330

Taft, President, 153, 201-205, 217, 227, 236, 240, 242, 270, 373
Tariff on lumber, 93, 94
Tawney, Representative, 153, 159, 196, 197, 274, 285
Taxation of forest lands, 146, 279
Taxing power, loss of, 273-281
Taylor, E. B., Representative, 113, 114
Taylor, E. T., Representative, 174, 262, 268, 272, 275
Teller, Secretary and Senator, 63, 64, 66, 67, 83, 86, 110, 127, 163, 173, 210, 247, 248, 271
Tillman, Senator, 247, 248
Timber, amount of standing, in each state, 318 n.
Timber and materials for railroad construction, 55
Timber and Stone Act, 58-60, 70-78, 87, 224-236, 259, 332
Timber bonds, 357
Timber culture, 35-37, 154, 310
Timber Culture Act, 43, 99
Timber sale policy of the Forest Service, 289
Timber thieves, the "bill to license," 88-90
Tongue, Representative, 181
Townsend, Representative, 122
Transfer of forest reserves to Department of Agriculture, 155-158
Trespass, timber, 23, 24, 41, 64, 71, 81, 82, 83, 88, 119, 243, 244
Trespassers, authority to arrest, 162, 163
Turner, Senator, 134
Turpentine, boxing of trees for, 245; distillers, trespass by, 83

Utah, not hostile to forest reserves, 295; timber lands in, 54

Van Hise, Charles, Dr., 153, 363, 364
Vance, Senator, 105
Vermont, state forest reserves in, 145
Vilas, Secretary, 88, 111
Votes on conservation, 53, 57, 60, 90, 91, 126, 139, 141, 211

Wadsworth, Representative, 197
Walcott, Charles D., 132, 369, 370
Walker, Thomas B., 47 n., 224, 319, 330, 337
Wallace, Representative, 163
Walthall, Senator, 101, 116
War, forest products research and the, 313
Warren, Senator, 157, 173, 195, 199, 275, 294
Washburn, Representative, 89
Washington, forests in, 47 n., 54; hostile to forest reserves, 295; timber land frauds, 81, 83, 84, 259; timber ownership in, 318, 319
Waste and theft of other resources than timber, 375
Waste of timber, 25, 26, 359-361
Water power, conservation of, 132, 149, 271; influence of forest cover on, 213; in the national forests, 267-270; purchase under Weeks law, 221
Water reserves, withdrawal of, 271
Weeks law, 210, 211, 212, 220, 221
Wells, Representative, 81, 126
Western attitude, analysis of, 294-296, 371-374; expression of, 83, 192
Weyerhaeuser, Frederick, 235, 289
Weyerhaeuser Timber Company, 317-322, 331
White, Senator, 140
White Mountains, demand for reserves in, 209
Williams, Representative, 89
Williamson, Commissioner, 66, 110
Williamson, J. N., Representative, 189, 241
Wilson, Commissioner, 32
Wilson, James, Secretary, 172, 208, 217, 261
Wilson, Senator, 83, 135, 184, 185
Wilson, Representative, 193
Windom, Senator, 42, 50, 53
Wisconsin, "saw log dynasty" in, 371;

state forest reserves in, 144, 145; forests in, 33, 54; timber stealing in, 41, 81
Wood preservation, 311, 312
Wren, Representative, 57
Wright, Senator, 43
Wright, Representative, 89
Wyoming, reserves in, 120

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